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COUNTY BOROUGH OF GATESHEAD

ANNUAL REPORT

OF THE

Public Health Department

For Year 1937

JAMES GRANT, M.D., Ch.B., D.P.H. (Glasgow)
Medical Officer of Health.

R. W. WILKINSON, *Chief Sanitary Inspector.*

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Appendix—Table I. Analysis of Causes of Death, 1937

Table II. Analysis of Deaths by Age, Ward and Season

Table III. Notifications of Infectious Disease

CONSTITUTION OF PUBLIC HEALTH COMMITTEES.

PUBLIC HEALTH COMMITTEE.

As on 31st December, 1937.

Chairman : Alderman P. S. Hancock.

Vice-Chairman : Councillor Mrs. Hall.

The Mayor (ex-officio).

Ald. S. A. E. Ellis.

„ W. Horn.

„ T. Ryan.

„ W. Tait.

„ J. White.

Coun. W. O. Arnold.

„ W. F. Barron.

„ Mrs. Bone.

„ G. Bennet.

„ C. T. Crankshaw.

„ Miss Dodds.

Coun. T. Foster.

„ Mrs. Gunn.

„ M. Hailes.

„ Mrs. Heppell.

„ N. McCretton.

„ J. McVay.

„ G. Neilson.

„ J. G. Ortton.

„ J. H. Ritson.

„ G. Robertson.

„ W. Telford.

„ W. Thompson.

MATERNITY AND CHILD WELFARE SUB-COMMITTEE.

Chairman : Councillor Mrs. Hall.

Ald. P. S. Hancock.

Coun. W. O. Arnold.

„ W. F. Barron.

„ Mrs. Bone.

Coun. Miss Dodds.

„ Mrs. Heppell.

„ J. G. Ortton.

„ G. Robertson.

Co-opted Members :—

Mrs. M. S. Cheeseright.

Coun. Miss R. Dodds.

Mrs. H. Gray.

Mrs. Morris.

Mrs. I. Snowdon.

HOSPITALS SUB-COMMITTEE.

Chairman : Alderman P. S. Hancock.

Vice-Chairman : Councillor Mrs. Hall.

Ald. W. Horn.

„ T. Ryan.

„ W. Tait.

Coun. W. O. Arnold.

„ W. F. Barron.

Coun. Mrs. Bone.

„ Miss R. Dodds.

„ T. Foster.

„ Mrs. Heppell.

„ G. Robertson.

Coun. W. Telford.

BLIND WELFARE COMMITTEE.

Chairman : Councillor C. T. Crankshaw.

Ald. S. A. E. Ellis.

„ P. S. Hancock.

„ W. Tait.

Coun. W. O. Arnold.

„ W. F. Barron.

Coun. C. T. Crankshaw.

„ Miss R. Dodds.

„ T. Foster.

„ M. Hailes.

„ Mrs. Hall

Councillor G. Robertson.

Co-opted Members :—

Mr. R. J. Smith (Home Teaching Society for the Blind).

Councillor Burdon

Councillor Stone

}

Education
Committee.

JAMES GRANT, M.D., CH.B., D.P.H. (Glasgow)

Consultants. F. C. Pybus, M.B., M.S., F.R.C.S.
W. E. Hume, C.M.G., M.A., M.D., F.R.C.P.

Public Health Department,
Greenesfield House,
Greenesfield House,
Mulgrave Terrace,
Gateshead 8.

To the Mayor, Aldermen and Councillors of the
County Borough of Gateshead.

I beg respectfully to present to you my second Annual Report on the health of the Borough. The report is compiled in accordance with the directions of the Minister of Health and is a comprehensive summary of the wide-spread activities of a modern public health department in a County Borough.

Certain figures for the year 1937 require some emphasis. From a statistical angle, the notable points are the low infantile mortality, maternal mortality and zymotic death rates, while the high incidence of diphtheria cases constitutes a record. The slight increase in the pulmonary tuberculosis death rate is probably transitory, but the continuous decline of the population within the last five years is a disturbing occurrence, in view of the manner of calculation of the general exchequer grant. The return of hospital admissions from the area shows that five per cent. of the population were sent into hospital during the year.

A surprising but gratifying feature of the year 1937 is the reduction of family overcrowding by roughly one third, without any curative action on the part of the local authority and as a result of somewhat intangible causes.

Through the Maternity and Child Welfare Scheme, which embodies a service of municipal midwives, the Council is now responsible for practically all the domiciliary midwifery of the area, although it does not control any in-patient accommodation for maternity cases.

The results of a special enquiry on the diet of expectant mothers are included in the Maternity and Child Welfare section of the report and the table given therein will give much scope for thoughtful speculation on the part of the reader.

While the local economic situation is yet far from satisfactory, it is distinctly a pleasure to record that great progress is being made in the modernisation of the Council's hospital facilities, chiefly with the help of the Commissioner for Special Areas, through whom there is also provided the Team Valley Trading Estate, an ever growing hive of industry, which is enlarging the scope of employment open to the townspeople.

I cannot conclude without recording my appreciation of the work of the medical, nursing, lay and clerical staffs of the department during an exceedingly busy year.

Your obedient Servant,

JAMES GRANT,

Medical Officer of Health.

I. Natural and Social Conditions of the Area.

Part I.—NATURAL AND SOCIAL CONDITIONS OF THE BOROUGH.

A. GENERAL REMARKS.

During the year that is past great changes affecting the Borough and its future were in actual progress.

The gradual movement of the inhabitants towards the South, South-East and South-West of the Borough continued, as the result of the housing activities of the local authority and of private enterprise. The process is still to continue for some years and there is no doubt that the extraordinary density of the population along the lower slopes of the town is gradually being reduced.

The whole change is in accordance with the normal development of industrial towns, which tends to make residence remote from employment.

Due to this trend, the open spaces within the Borough are all being utilised, and accordingly it will soon be necessary for the Borough to extend its area.

The rapid development of the Gateshead Trading Estate is a phenomenon that must be chronicled. At the end of the year several factories were in operation and numerous others in course of erection, so that what was formerly waste land is now rapidly becoming a model factory centre, laid out in accordance with carefully devised plans.

As yet the return of industry to the area has made little difference to the financial condition of the people, but a definite impression has been formed that economically there are improved conditions within the area in the form of diminished unemployment and an increased prosperity of many of the townspeople. Nevertheless there remains; particularly among the lower wage-earning and unskilled labouring classes, a good deal of financial hardship, which has scarcely been touched as yet by the increased industrial activity in the Tyneside area as a whole.

The Royal Commission on Local Government in the Tyneside Area issued its report during the year, but by the end of 1937 it was very evident that the report aroused no great enthusiasm among the local authorities involved and that substantially the local government units of the area will remain as they are for some time to come.

The development of Gateshead's health services, so long retarded by the poverty of the area, has been expedited by the generous financial aid from the Special Areas Commissioner towards the reconstruction of the Isolation Hospital and the erection of a new General Hospital. These two schemes received final approval during the year while the work of building the new health centre at Greenesfield House was actively in progress at the end of the year.

B. SOCIAL CONDITIONS.

The industries of the Borough were listed in the report of last year and it is gratifying to record that there has been no substantial diminution in their activity. Indeed several of the industries of the town are planning extensions.

The Gateshead Team Valley Trading Estate had 27 factories in occupation at the end of the year, of which 23 were in actual process of production. A further 24 factories were in process of erection.

Manufactures carried on in the premises in occupation were as follows :—Clothing, Pies and Sausages, Potato Crisps, Confectionery, Dried Fruits, Furnishings, Doors, Shopfittings, Reinforcement metal, Glazing, Wiring, Cycle Dynamos, Electrical Repairs, Glass Bottles, Fibreboard, Haulage, Laminated Glass and Toffee. A bank and two warehouses were also in use.

None of the industries within the Borough are dangerous to the health and they continue to employ male and unmarried female labour.

UNEMPLOYMENT STATISTICS.

The following figures supplied by the Manager of the Employment Exchange summarises the position at the end of each of the last 7 years :—

Wholly Unemployed.

	Dec. 1931	Dec. 1932	Dec. 1933	Dec. 1934	Dec. 1935	Dec. 1936	Dec. 1937
Men	9,646	10,736	10,137	9,880	9,541	6,028	6,134
Women	1,204	871	898	849	833	697	763
Boys (under 18)	421	424	458	525	208	95	135
Girls (under 18)	281	291	391	474	149	35	75
	11,552	12,322	11,884	11,728	10,731	6,855	7,107

On Short Time.

Men	1,248	1,745	1,073	1,139	904	676	452
Women	278	415	265	289	173	322	122
Boys	52	69	30	34	29	14	6
Girls	18	71	52	37	25	50	173
	1,596	2,300	1,420	1,499	1,131	1,062	753

STATISTICS OF POOR LAW OUTDOOR RELIEF.

Through the kindness of the Public Assistance Officer, Mr. E. Waton, the following statistics for 1937 are included with comparative figures for previous years.

	1931	1932	1933	1934	1935	1936	1937
(1) Average weekly number of ordinary "Cases" chargeable.	1,518	1,559	1,705	1,922	2,172	2,319	2,752
(2) Average weekly number of able-bodied "Cases" chargeable	961	1,479	1,757	1,919	1,726	1,653	490
(3) Total cost of relief for the year.	£92,372	£116,366	£128,017	£144,913	£155,588	£160,452	£118,917
(4) Number of persons relieved							
ORDINARY.							
Men	662	671	732	847	998	1,075	1,358
Women	1,322	1,341	1,448	1,655	1,888	2,017	2,332
Children.....	935	913	966	1,111	1,291	1,231	1,500
ABLE-BODIED.							
Men	904	1,397	1,636	1,799	1,623	1,538	444
Women	749	1,117	1,258	1,370	1,182	1,107	333
Children.....	1,684	2,266	2,665	2,897	2,342	2,045	546

Indoor Relief.

Persons chargeable to Gateshead in High Teams Institution at end of year—513.

C. GENERAL STATISTICS OF THE AREA.

Population (Estimated by Registrar-General 1937).....	117,600
Population of Present Borough (Census 1931).....	124,506
Area of Borough (in acres).....	4,468
Number of Inhabited Houses (Valuation Lists 1937).....	31,769
Density of Population per acre	26.3
Number of Persons per inhabited house.....	3.7
Rateable Value at 1st April, 1937.....	£552,861
Sum represented by Penny Rate.....	£2,147
Rate in the £ levied in 1937-1938	15/-

D. VITAL STATISTICS FOR 1936.

	Males.	Females.	Total.	Rate
Live Births.				
Legitimate	1077	938	2015	
Illegitimate	41	34	75	
Total ...	1118	972	2090	17.7 per 1000 of population.
Still Births.				
Legitimate	48	39	87	
Illegitimate	—	—	—	
Total ...	48	39	87	39.9 per 1000 total births.
Deaths.	860	752	1612	13.7 per 1000 of population.
Excess of Births over Deaths				
	258	220	478	
Infantile Mortality.				
Legitimate	91	62	153	75 per 1000 live legitimate births.
Illegitimate	5	3	8	106 per 1000 live illegitimate births.
Total ...	96	65	161	77 per 1000 live births.
Maternal Mortality.				
a. From Sepsis ...		2		.91 per 1000 total births.
b. From other causes		6		2.75 per 1000 total births.
Total ...		8		3.67 per 1000 total births.
Deaths from Tuberculosis.				
a. Pulmonary	74	44	118	1.00 per 1000 of population.
b. Non-Pulmonary	5	9	14	.11 per 1000 of population.
c. All Forms ...	79	53	132	1.12 per 1000 of population.
Deaths from epidemic diseases.				
Scarlet Fever	0	0	0	
Diphtheria	15	12	27	
Measles	2	1	3	
Whooping Cough ...	4	1	5	
Enteric Fever	0	0	0	
Diarrhoea, infantile	12	7	19	
Total Zymotic Deaths	33	21	54	.45 per 1000 of population.
Deaths from Cancer	101	96	197	1.67 per 1000 of population.

Population.

The Registrar General estimates the population of the Borough for the year 1937 to be 117,600, representing a reduction of 1,400 as compared with the previous year and a reduction of roughly 7,000 as compared with the census of 1931. It is hard to believe that this reduction of population in the estimate of the Registrar General is justified, in view of the increased industry of the town and the continued excess of births over deaths during the last 7 years.

Nevertheless as a check on the Registrar General's estimate, the following information should be of interest.

At the Housing Survey of 1936, the enumerators found a population of 117,830, when the Registrar General's estimate was given as 119,026.

In a re-survey carried out in 1937, the population found by the enumerators amounted to 115,000, when the Registrar General has assessed the population as 117,600.

This would mean that the estimated reduction of population is approximately correct and the reason for the reduction is probably to be found in families leaving the town to seek work elsewhere.

Some stress was laid in the report for 1936 upon the changing age-distribution of the population. In the present year it is evident from the death returns that this changing age-distribution is beginning to exercise a material effect on the death rate.

The percentage of deaths of persons over 65 years of age as compared with the total deaths, has been steadily rising as shown in the table given below :—

Year.	Total Deaths.	Deaths over 65 years.	Percentage.
1937	1612	679	42%
1936	1578	609	37%
1935	1609	631	39%
1934	1645	605	36%
1933	1645	600	35%
1932	1639	545	33%
1931	1709	670	33%
1930	1547	511	33%
1920	1800	541	30%

Births.

The total live births in 1937 amount after transfers to 2,090, giving a rate of 17·7 per 1000 of population, which is to be compared with a rate of 14·9 in England and Wales and 14·9 in the County Boroughs. As shown by the accompanying graph it rather appears as if the rate was becoming stabilised for the town, there being little real change during the last 6 years.

Deaths.

The total deaths in 1937 amounted to 1,612, yielding a rate of 13·7 per 1000 as compared with rates of 12·4 for England and Wales and 12·5 for the County Boroughs.

Both the local and national death rates have therefore increased as compared with last year and the national death rate is the highest recorded since 1929. The reasons for this increase have already been partly demonstrated in the high proportion of deaths of persons over 65 years of age. Another reason for the increased rate is to be found in the epidemic of Influenza and Pneumonia, which prevailed in the first quarter of the year.

A complete analysis of the causes of death, classified by age, sex and ward distribution is included in the appendix. Perusal of this table shows the killing diseases to be affections of the heart and circulation (449 or 28% of the total deaths), tuberculosis (132 or 8%), pneumonia and other diseases of the lungs (202 or 12%) and cancer (197 or 12%).

Despite the rise in the death rate, there are certain statistics of 1937 which must be very gratifying to the local authority. The low infantile mortality rate of 77 is the second lowest ever achieved, the figure for 1933 being 75. The death rate from epidemic diseases is the lowest ever recorded despite the heavy incidence of diphtheria throughout the year. Deaths from measles and whooping cough were extremely low, while scarlet fever mortality was absent. The maternal mortality rate of 3·6 is also an exceedingly low figure, the lowest figure of 3·3 maternal deaths per 1000 live births having been recorded in 1933, while the rate during the intervening three years has averaged nearly double.

County Borough of Gateshead

BIRTH RATE per 1,000 population

1871-1937

AVERAGE BIRTH RATES

1871-1880
45.3

1881-1890
38.6

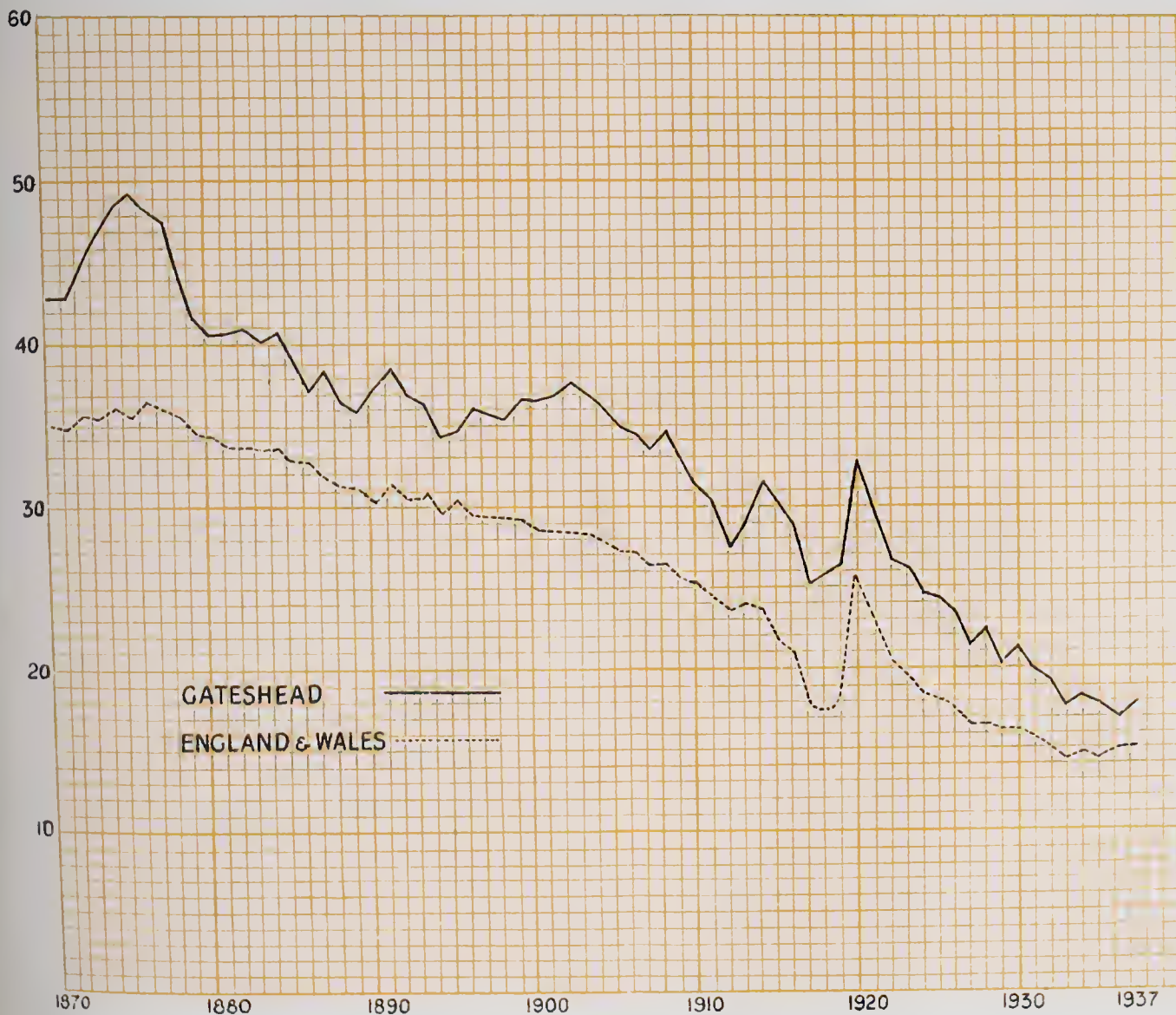
1891-1900
36.0

1901-1910
34.8

1911-1920
28.7

1921-1930
24.0

Rate per
1000



County Borough of

BIRTH RATE per 1,000

1871-1937

AVERAGE BIRTH RATE

1871-1880 1881-1890 1891-1900 1901-1910 1911-1920 1921-1937



County Borough of Gateshead

DEATH RATE per 1,000 population

(at all ages and from all causes)

1871-1937

AVERAGE DEATH RATES

1871-1880
26.1

1881-1890
21.3

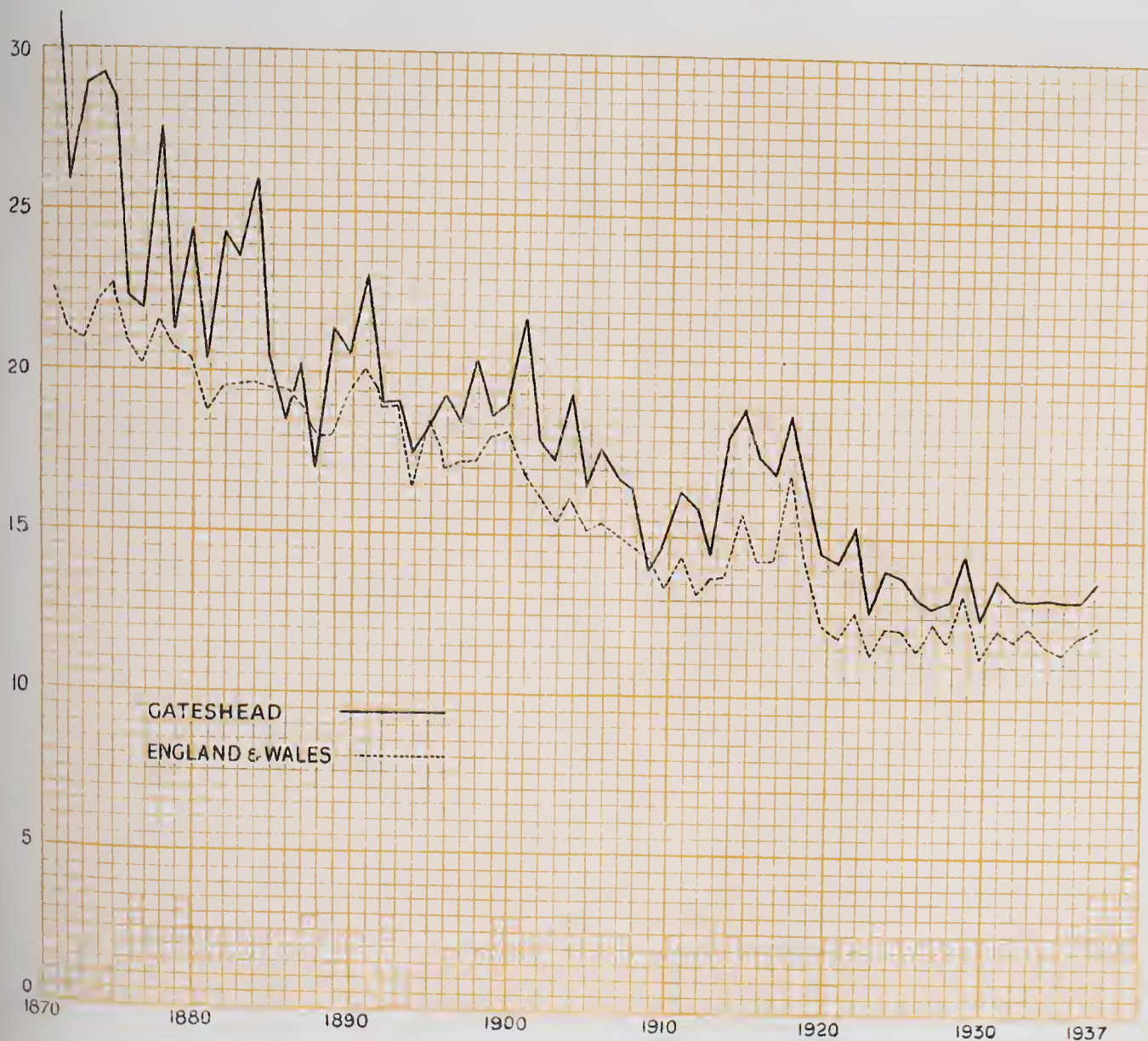
1891-1900
19.4

1901-1910
17.4

1911-1920
16.9

1921-1930
13.7

Rate per
1,000



DEATH RATE

for all ages and from all causes

1871-1937

AVERAGE DEATH RATE



The following table summarises the principal statistical rates for the last 10 years :—

	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928
Population	117,600	119,026	121,200	123,000	124,320	122,500	123,700	122,600	126,200	123,100
Birth Rate	17.7	17.2	18.1	18.4	18.0	19.3	20.0	21.3	20.4	22.3
Death Rate	13.7	13.2	13.2	13.3	13.2	13.3	13.8	12.6	14.6	13.2
Infantile Mortality Rate	77.	91.	90.	87.	75.	94.	100.	91.	107.	85.
Maternal Death Rate per 1000 total births	3.6	6.0	5.6	5.9	3.3	6.0	4.2	7.6	6.1	*
Tuberculosis Death Rate	1.12	1.12	1.24	1.39	1.37	1.56	1.47	1.41	1.72	1.53
Zymotic Death Rate	.45	.77	.52	.69	.53	.58	.68	.58	.84	.64
Cancer Death Rate	1.67	1.67	1.30	1.43	1.41	1.41	1.18	1.19	1.27	1.37

*Refers to live births only.

Vital Statistics for the whole district during 1937 and previous years.

Year.	Population estimated to middle of each year.	Births.			Total Deaths Registered in the District.		Transferable Deaths.*		Nett Deaths belonging to the District.			
		Un-corrected Number.	Nett.		Number.	Rate.	of Non-residents Registered in the District.	of Residents Registered in the District.	Under 1 year of age.		At all ages.	
			Number.	Rate.					Number.	Rate per 1000 Nett Births.		
1	2	3	4	5	6	7	8	9	10	11	12	13
1927	127,400	2513	2744	21.5	1486	11.6	67	241	257	93.	1660	13.0
1928	123,100	2502	2752	22.3	1469	11.9	73	237	234	85.	1633	13.2
1929	122,600	2267	2503	20.4	1634	13.3	93	259	269	107.	1800	14.6
1930	122,600	2344	2619	21.3	1401	11.4	85	231	240	91.	1547	12.6
1931	123,700	2238	2480	20.0	1566	12.6	92	235	250	100.	1709	13.8
1932	122,500	2078	2369	19.3	1527	12.4	101	213	224	94.	1639	13.3
1933	124,320	1964	2238	18.0	1516	12.1	92	221	170	75.	1645	13.2
1934	123,000	1965	2264	18.4	1474	11.9	74	245	197	87.	1645	13.3
1935	121,200	1903	2202	18.1	1410	11.6	70	269	199	90.	1609	13.2
1936	119,026	1796	2050	17.2	1429	12.0	73	222	187	91.	1578	13.2
1937	117,600	1783	2090	17.7	1478	12.4	88	222	161	77.	1612	13.7

* "Transferable Deaths" are Deaths of persons who, having a fixed or usual residence in England or Wales, die in a district other than that in which they resided.

E. WARD STATISTICS.

Ward.	Estimated Population	Birth Rate	Death Rate	Infantile Mortality	Tuberculo- sis Death Rate	Zymotic Death Rate	Cancer Death Rate	Respira- tory Disease Death Rate
I. North	8660	25.0	15.8	64	1.30	1.03	1.84	2.31
II. North East	8250	24.6	17.2	88	1.21	.84	2.42	2.30
III. North West	13860	23.9	14.4	87	1.51	.50	1.51	2.67
IV. Central	10913	15.3	15.0	65	1.00	.45	1.92	2.29
V. East Central	11340	20.4	16.3	103	2.11	.70	1.58	2.02
VI. South Central	10955	11.7	11.4	23	.45	.09	1.36	1.55
VII. West Central	10816	15.9	12.9	46	.27	.18	2.12	1.29
VIII. East	15523	16.4	12.0	101	1.15	.70	1.15	1.35
IX. South	13220	14.8	13.3	86	.98	.22	1.73	.98
X. West	14063	13.1	11.0	59	1.06	.07	1.56	.92
	117600	17.7	13.7	77	1.12	.45	1.67	1.71

By comparison with last year it is obvious that the population in the 1st, 2nd, 4th, 5th and 6th wards is diminishing and that the population of the 8th, 9th and 10th wards is increasing, while the population of the 3rd and 7th wards is practically stationary.

This change is in part due to the housing activities of the local authority.

The relation of the ward birth rates to one another shows little change from last year; the 1st, 2nd, 3rd and 5th wards all maintain a relatively high level.

The death rate divides the wards into two classes—wards with a death rate of over 14 and under 14 per 1000 respectively. Wards 1 to 5 fall into the first class and wards 6 to 10 into the second. This was the case last year also.

Although there is a general fall in the Infantile Mortality as compared with 1936, the Infantile Mortality in the East ward has actually gone up to the high figure of 101 per 1000 births.

The tuberculosis rate and the zymotic rate tend to conform to the rule that the five Northern wards are relatively more unhealthy than the others. but the East ward again shows a marked increase in the tuberculosis rate as compared with 1936. The cancer mortality rates have fluctuated greatly as compared with last year.

The respiratory diseases death rate divides the wards into the same two classes as the general death rate, wards 1 to 5 being relatively unhealthy as compared with wards 6 to 10.

II. Health Services of the Area.

A. HOSPITAL ACCOMMODATION.

The subject of hospital accommodation for the sick of the Borough has been occupying the attention of the Borough Council for some time. A very complete analysis of the available accommodation was given in the report for 1936, coupled with a proposal that the Public Assistance Institution should be re-organised and that the sick proper should be removed from the institution and housed in a new General Hospital to be erected adjoining the Isolation Hospital.

The extension of the existing Isolation Hospital was approved in 1935 and plans were submitted to the Minister of Health in 1936.

During the year 1937, various negotiations took place with the Ministry of Health regarding the Council's proposals in respect of hospital facilities.

The report on local government on Tyneside was issued in June 1937 and in the light of that report, the Council's proposals for re-organised and new hospital accommodation were the subject of a conference with officials of the Ministry of Health in July 1937.

In a letter of the 19th August, 1937, the Minister of Health re-affirmed his consent to the extension and alteration of Sheriff Hill Isolation Hospital, declared that he was satisfied of the need for further hospital accommodation for Gateshead and was prepared to consider proposals for the erection of a general hospital of 200-250 beds. The Minister further declared that he was satisfied that new accommodation for nurses at the High Teams Institution was necessary.

By the end of 1937, the work of building the extensions to the fever hospital had been put out to tender, while the consulting engineers were advising as to the arrangements to be made for the supply of heating and power from a common plant to the extended isolation hospital and proposed new general hospital.

Included along with the Council's proposals for the provision of hospital accommodation, was a suggestion that one of the three departments, preferably the "schools" blocks, of the High Teams Institution should be organised as a small colony for mental defectives, leaving the remaining two departments, namely, the house and hospital blocks, for the use of able-bodied

and of the aged and infirm respectively. This matter was therefore referred to the Public Assistance Committee and Mental Deficiency Committees of the Council for further consideration.

The proposed new general hospital is being planned to provide 6 main nursing units of approximately 30 beds each (for general medical and surgical purposes), 1 unit of 20 beds for children and 2 small units of 10 beds each for throat, nose and ear surgery and for diseases of the eyes respectively. It is also proposed that within the general hospital, a separate maternity block of 25 beds should be erected.

The scheme envisages also an out-patient department for the types of cases to be dealt with in the hospital, an X-ray department and an operating unit comprising two theatres.

At the end of the year, the draft plans of this accommodation were still the subject of conferences and correspondence with officials of the Ministry. Application was made for help from the Special Areas Commissioner towards the capital cost of the various schemes, and it was understood to be probable that 75% of the capital cost of each scheme would be contributed by the Commissioner.

During the year 4 additional beds were made available for tuberculous patients in Whinney House Hospital while the Poole Joint Sanatorium Committee proceeded with the scheme for the erection of a Joint Sanatorium, in which 40 beds will be available for treatment of patients from Gateshead. This scheme is also grant-aided by the Special Areas Commissioner.

GRANTS TO VOLUNTARY HOSPITALS.

The Gateshead Borough Council subsidises various voluntary institutions in Newcastle and Gateshead as detailed in the following list :—

[illegible]

Treatment of Gateshead Patients in Hospitals—1937.

									In patients.
INFECTIOUS DISEASES.									
Sheriff Hill Isolation Hospital	...	...	...	...	...	...	...	...	870
Walkergate Isolation Hospital	...	...	...	...	...	...	...	...	2
									872
TUBERCULOSIS.									
Whinney House Sanatorium	...	...	...	...	...	...	...	...	141
Stanhope Sanatorium	...	...	...	...	...	...	...	...	11
Wolsingham Sanatorium	...	...	...	...	...	...	...	...	31
Barrasford Sanatorium	...	...	...	...	...	...	...	...	35
Stannington Sanatorium	...	...	...	...	...	...	...	...	25
									243
MATERNITY.									
Princess Mary Maternity Hospital (287 deliveries)					...	...	...	...	376
High Teams Institution	...	...	...	...	...	...	...	...	34
									410
GENERAL MEDICAL AND SURGICAL.									
Royal Victoria Infirmary	...	...	...	...	...	...	...	...	1559
The Hospital for Sick Children	...	...	...	...	...	...	...	...	175
Gateshead Children's Hospital	...	...	...	...	...	...	...	...	1224
High Teams Institution (Hospital beds)	...	...	...	...	...	...	...	...	915
									3873
SPECIAL HOSPITALS.									
Throat, Nose and Ear Hospital, Rye Hill	...	...	...	...	...	...	...	...	174
Eye Hospital	...	...	...	...	...	...	...	...	67
Babies' Hospital	...	...	...	...	...	...	...	...	30
Stannington Mental Hospital	...	...	...	...	...	...	...	...	57
Sanderson Orthopaedic Hospital	...	...	...	...	...	...	...	...	5
									333
Grand Total									5731

B. CLINICS AND WELFARE FACILITIES.

The scheme for the erection of a new health centre in the grounds of Greenesfield House took shape and by the end of the year, the building was well on the way to completion.

The new health centre provides consultation and treatment facilities for mothers and children under school age, as well as for school children.

The clinics and centres serving the area are listed below :—

(1) GREENESFIELD HEALTH CENTRE.

School Clinic	...	...	...	...	9 a.m.—9-30 a.m. daily. 4 p.m.—5 p.m. daily—except Saturdays. Special cases by appointment.
Child Welfare Centre	...	...	...	...	2 p.m. to 5 p.m.—Tuesday and Thursday. (Medical Session—Tuesday. Nurses' Session—Thursday).
Ante-Natal Clinic	...	...	...	...	10 a.m. to 12 noon—Wednesday. 2 p.m. to 5 p.m.—Wednesday and Friday.
Tuberculosis Dispensary	...	...	...	...	9 a.m. to 5 p.m. daily (Saturday, open till 12 noon only). Also open once per month on Wednesday Evening from 5 p.m. to 6-30 p.m.
School Dental Clinic	...	...	...	...	9 a.m. to 5 p.m. daily (by appointment). Saturday 9 a.m. to 12 noon.
Ophthalmic Clinic	...	...	...	...	By special appointment.

- (2) **GATESHEAD DISTRICT NURSES' HOME.**
Ante-Natal Clinic Tuesday 2 to 4-30 p.m. (District Nurses cases only).
- (3) **BENSHAM SETTLEMENT.**
Infant Welfare Centre 2 p.m. to 5 p.m.—Tuesday and Thursday.
(Medical Session—Thursday. Nurses' Session—Tuesday).
- (4) **PRESBYTERIAN CHURCH HALL, LOW FELL.**
Infant Welfare Centre 2 p.m. to 5 p.m.—Wednesday (Medical Session).
- (5) **MOORE STREET METHODIST HALL.**
Infant Welfare Centre 2 p.m. to 5 p.m.—Monday (Medical Session).
- (6) **WREKENTON MINERS' WELFARE HALL.**
Ante-Natal Clinic and Infant Welfare Centre 9-30 a.m. to 12 noon—Alternate Thursdays.
- (7) **VICTORIA ROAD METHODIST CHURCH HALL.**
Infant Welfare Centre 10 a.m. to 12 noon—Tuesday.
- (8) **NEWCASTLE GENERAL HOSPITAL.**
Joint Committee Venereal Diseases Clinic for the Tyneside Area. (Medical Officer—Dr. A. E. W. McLachlan), *Medical Officer's Hours*—Monday to Friday—
10 to 12 a.m. and 3 to 7 p.m. Saturday—
11 to 12 noon and 4-30 to 6-30 p.m.
Hours for Treatment—7-30 a.m. to 7-30 p.m.
Mondays to Saturdays. 10 to 12 noon—
Sundays and Holidays.

C. MATERNITY AND CHILD WELFARE.

Report by Dr. Margaret B. Herbst.

1. MIDWIVES.

Thirty midwives notified their intention to practise midwifery in the Borough. All these are qualified by examination and possess the certificate of the Central Midwives' Board.

On the whole the midwives have carried out their duties efficiently and have paid close attention to the rules and regulations of the Central Midwives' Board.

There was no necessity to proceed against any of them during the year, but warning notices were sent regarding minor deviations from the rules in three cases.

List of Midwives who have notified their intention to practise as Midwives within the Borough in 1938.

Municipal Midwives.

				Enrolment No.
1 Bell,	Dorothy E.	... 6, Chepstow Gardens, Gateshead	...	69702
2 Bolam,	Mary A.	... "Glenroyd," Dryden Road S., Gateshead	...	54946
3 Exley,	Elsie	... 62, The Avenue, Gateshead...	...	51937
4 Faldon,	Annie W.	... 215, Sunderland Road, Gateshead	...	85921
5. Jobson,	Gladys May	... 58, Saltwell Road, Gateshead	...	71062
6 May,	Wilhelmina...	... 229, Victoria Road, Gateshead	...	58007
7 Ottaway	Louisa J.	... 2, George Street, Gateshead	...	67421
8 Poole	Sarah	... 49, Exeter Street, Gateshead	...	76016
9 Smithson	Henrietta	... 72, Inskip Terrace, Gateshead	...	65996
10 Tait,	Sarah J.	... 41, Kell's Lane North, Gateshead	...	25858

District Nursing Association.

1 Barton,	Rosina	...	District Nurses' Home, Coatsworth Road,	50162
2 Bell,	Edna Mary	...	Gateshead	95846
3 Morrison,	Margaret M.	...	" " " "	55970
4 Norton,	Violet Ruby	...	" " " "	95504
5 Patterson,	Theresa	...	" " " "	93953
6 Patterson,	Violet Alexandra	...	" " " "	96310
7 Phalp,	Annie	...	" " " "	72903
8 Sinclair,	Isabel M.	...	" " " "	81211
9 Stoddart,	Jeannie	...	" " " "	101377

Midwives in Private Practice.

1	Anderson,	Lily	...	...	11, Newton Street, Gateshead	...	...	72218
2	Bell,	Nora May	...	...	5, Alderley Road, Gateshead	...	...	77988
3	Brown,	Gladys	...	...	141, Rodsley Avenue, Gateshead	...	...	82450
4	Conner,	Helen S.	...	...	28, Denmark Street, Gateshead	...	...	58275
5	Fawcett,	Annie	...	...	42, Glenbrooke Terrace, Gateshead	...	...	67731
6	Gordon,	Elizabeth	...	...	The Chalet Nursing Home, Cornmoor Road, Whickham	...	...	88839
7	Hannant,	Sarah	...	...	13, Pottersway, Sheriff Hill, Gateshead	...	...	79056
8	Phillipson,	Ellen	...	...	Glencairn, Long Bank, Wrekenton, Gateshead	...	...	72332
9	Ross,	Ethel	...	...	145, Prince Consort Road, Gateshead	...	...	33182
10	Stewart,	Sybil	...	...	40, Cedar Crescent, Low Fell, Gateshead	...	...	90253

Routine visits have been paid to the midwives practising in the Borough and quarterly inspections made of their registers of cases, temperature charts, ante-natal records, bags and appliances.

6 midwives had their bags, appliances and clothing disinfected during the year.

Surrender of Certificate.

One midwife who was sixty-five years of age, was asked to surrender her certificate under the provisions of the Midwives Act. She agreed to do so and was paid the compensation provided in the Act.

2. Births.

There were 2,090 live births registered during 1937. This figure excludes 23 babies born in the Borough, whose parents belong to other districts, and includes 330 babies born to Gateshead parents in other areas, chiefly in Newcastle Maternity Hospital.

Of the total live births, 1,118 were males and 972 females. This represents a birth rate of 17.7 per 1,000 of the population, showing an increase of .5 per 1,000 from 1936. 75 births (41 males and 34 females) or 3.5 per cent. were illegitimate.

The following is a summary of the number of live births and birth rate for each ward:—

Ward.	No. of Live Births.	Birth Rate.
North	217	25.0
North-East	203	24.6
North West	332	23.9
Central	168	15.3
East Central	232	20.4
South Central	129	11.7
West Central	172	15.9
East	256	16.4
South	196	14.8
West	185	13.1

It will be seen that the highest birth rate occurred in the North Ward and the lowest in the South Central Ward.

The particulars regarding the live births and stillbirths occurring during the year are as follows :—

<i>Attended by</i>	<i>No. of Live Births.</i>	<i>No. of Still Births.</i>
Doctors	618	20
Midwives	991	38
Maternity Hospital—		
(a) In wards	266	23
(b) At home	172	6
Nursing Homes	43	—

In 356 of the doctors' cases a registered midwife was in attendance as a maternity nurse.

Stillbirths.

There were 87 stillbirths during the year ; this figure excludes one stillbirth belonging to another district and includes 23 that were registered in other districts but belonged to Gateshead.

Of the 87 stillbirths, 48 were males and 39 females. 84 stillbirths were investigated during the year ; of this number 49 were at full term, 13 had reached the eighth month and 22 the seventh month of gestation.

The causes of the stillbirths were :—

	Full Term.	Pre- mature.
1. Complications of Labour.		
Breech Presentation.....	6	4
Prolonged Labour	6	1
Difficult forceps delivery	3	—
Cord around foetus	4	1
Prolapse of cord	1	1
2. Ante-Partum Haemorrhage.		
Placenta Praevia	4	2
Accidental Haemorrhage.....	1	2
3. Toxaemia of Pregnancy.		
Albuminuria	4	5
Eclampsia	—	2
4. General ill-health	5	7
5. Falls or other accidents	1	2
6. Foetal States.		
Monster	2	1
Twin Pregnancy	—	—
7. Causes unknown	12	7
	<hr/> 49	<hr/> 35

In each case the mother was advised that in the event of a subsequent pregnancy, she should seek advice as early as possible, in the hope that by suitable treatment, further stillbirths might be prevented.

3. Work of Health Visitors.

Each district in the Borough has been visited regularly by the health visiting staff, who call at homes where births have taken place. They also pay routine visits to children up to the age of five years, and special visits to homes where there are such diseases as ophthalmia neonatorum, measles, pneumonia, whooping cough or diarrhoea.

Visits are also paid to expectant mothers, though since August 1st, the municipal midwives have undertaken the home visiting of all mothers booked to them.

The health visitors also act as tuberculosis nurses and as school nurses.

It was not found expedient to increase the health visiting staff during 1937 owing to lack of accommodation, but when the new health centre is in use, two nurses are to be added to the staff.

It is hoped that with the additional staff it will be possible to carry out more adequate visiting of children between the ages of 2 and 5 years, as this is the branch of visiting which has suffered most owing to the shortage of staff previously.

SUMMARY OF HOME VISITS.

Infants.

At Six months.

Born at full term	2176	Breast Fed.....	771 (48·2%)
Prematurely	55	Partially breast fed	129 (9·2%)
		Artificially fed	698 (42·6%)

Visits to Infants under 1 year :—

First Visits after notification	2054
No. of revisits	6118
No. of Stillbirths visited	67
Visits to children 1-5 years	9635
Visits to expectant mothers :—	
First visits	310
No. of re-visits	53

Miscellaneous Visits.	1st Visits	Revisits	Total
Puerperal Disease	13	21	34
Ophthalmia Neonatorum	6	67	73
Measles	8	—	8
Whooping Cough	51	—	51
Pneumonia	161	70	231
Erysipelas	2	—	2
Diarrhoea (Infantile)	23	8	31
Jaundice	12	—	12
Dysentery	3	—	3
Cerebro-Spinal Meningitis	3	—	3
Scarlet Fever	1	—	1
Chicken Pox	1	—	1
Visits to Midwives	50	8	58
Visits to cases of Tuberculosis	247	1947	2194

The total number of visits paid by Health Visitors during the year was 20,939.

4. ANTE-NATAL CARE.

Three sessions have been held throughout the year at the Greenesfield Ante-natal clinic, two sessions on Wednesday and one on Friday afternoon.

The Wrekenton clinic has been held on alternate Thursday mornings in conjunction with the infant welfare centre, and in November a session was commenced on Tuesday afternoon at the District Nurses' Home. It was only possible to hold five sessions at this centre before the end of the year.

The work of the ante-natal clinics has increased very considerably; the commencement of the municipal midwives scheme, and the continued supply of free milk and other foods from the Birthday Trust Fund, have both contributed to the increase.

The following is a summary of the attendances at the various centres :—

Centre	No. of Sessions	No. of 1st visits	No. of Revisits	Total Attendances	Average per Session
Greenesfield	155	1136	2046	3182	20.5
District Nurses' Home	5	50	10	60	12.0
Wrekenton	26	17	54	71	2.7
	186	1203	2110	3313	—

At Greenesfield clinic there were 201 women who attended the clinic during 1936 and were undelivered at the end of the year ; the following are the particulars of these :—

186 live births.
12 still births.
3 left the district.

Of the 1,136 women who attended the clinic for the first time during the year the following are the particulars :—

744 live births.
27 still births.
5 miscarriages.
9 left the district.
9 not pregnant.
342 were undelivered at the end of 1937.

The following conditions were noted :—

Ante-partum Haemorrhage	28
Abnormal Presentation	11
Slightly contracted Pelvis	4
Vaginal Discharge	19
Vomiting	40
Albuminuria	56
Varicose Veins	109
Oedema	47
Constipation	105
Anaemia	35
Bronchitis	44
Pulmonary Tuberculosis	8
Cardiac Disease.....	17
Venereal Disease	1
Spinal Curvature	1
Edentulous	22
Dental Caries (5 or more bad teeth)	268
" " " (less than 5 bad teeth)	404
Pyorrhoea	34
Laryngitis	1
Scabies	7
Nutrition (Bad)	63
Sub-normal nutrition	324
Not pregnant.....	9

17 mothers were advised to consult their own doctors, 20 were sent to the Princess Mary Maternity Hospital, and 3 to the High Teams Hospital.

The nutrition was again found to be of a low standard among a large number of the mothers.

The foodstuffs supplied by the Birthday Trust Fund, which are only for distribution among the unemployed, naturally attract a large number of women, whose physique is very poor, owing to several years of unemployment. The state of the teeth among these women was very bad. A scheme has been arranged during the year, whereby mothers will have their teeth attended to by an additional dentist in the new health centre.

At Wrekenton Clinic the following conditions were noted :—

Vomiting	2
Varicose Veins.....	3
Constipation	6
Anaemia	1
Bronchitis	1
Dental Caries .....(5 or more bad teeth)	4
Dental Caries .....(less than 5 bad teeth)	3
Sub-normal nutrition	10

There were 8 mothers undelivered at the end of 1936, these were all delivered of live infants.

Of the 17 who attended for the first time during 1937, the following are the particulars :—

- 10 live births.
- 1 still birth.
- 5 undelivered at end of year.
- 1 left the district.

District Nurses' Home.

Following upon the Midwives Act, 1936, the District Nursing Association were asked to join the scheme and to provide five of the midwives. This was done and in extending the Nurses' Home to provide rooms for the midwives, provision was made by the Nursing Association for a set of clinic rooms for ante-natal care for Association patients.

Mothers attending this clinic are those who have booked the district nurses for their confinements, as midwives.

Those who book the nurses as maternity nurses get their ante-natal care from their own doctors.

In the report for last year it was noted that one of our most pressing needs is for a maternity hospital or maternity unit attached to a general hospital.

Plans have now been passed for a maternity unit of 25 beds ; this will make ample provision for ante-natal beds, which have been rather difficult to obtain formerly.

The municipal midwives assist now in the work of the ante-natal clinics, and soon it will be possible to organise the scheme so that they attend regularly with their own patients.

Birthday Trust Fund.

It is very gratifying to have to report that during this year the Birthday Trust continued to send a supply of free foodstuffs for expectant mothers whose husbands were unemployed. From the first of May the monthly grant was increased in quantity to :—

460 1-lb. tins of Dried Milk.

460½-lb. tins of Ovaltine.

306 6-oz. bottles of Minadex.

48 4-oz. cartons of Marmite.

These gifts were for use during the 10 weeks preceding the confinement and for 3 weeks afterwards.

This food has been a tremendous help and has done the mothers a great deal of good.

The results have been exceedingly good as shown by the following figures :—

Jan. 1st to Dec. 31st, 1937	No. of Neo-natal Deaths	No. of Still Births	No. of Maternal Deaths	No. of cases of puerperal sepsis or pyrexia
Total number of mothers receiving food : 738	8	16	1	4
Total number of mothers not receiving food : 1,352	45	71	7	20

In addition to the assistance mentioned above, the Birthday Trust also sent parcels of sterilised maternity outfits for use after the commencement of the working of the Midwives Act, 1936. These came to hand in September and up to the end of the year 169 were distributed. The municipal midwives have found these packets a great help in the performance of their work.

5. MATERNAL WELFARE.

(a) Maternal Mortality.

During the year 8 women died from conditions associated with pregnancy and parturition. This was five less than last year. There were also 3 deaths among women who died from inter-current disease of long standing ; the strain of pregnancy, although not the actual cause of death, probably brought about the final breakdown in these cases.

The following is an analysis of the cases :—

Case No.	Age	Midwife attending	Doctor attending	Booked Hospital Case	Removed to Hospital	Cause of Death
1	34	—	—	yes	—	Streptococcal meningitis. Pyæmia: Valvular disease of heart. Recent childbirth.
2	37	—	yes	—	yes	Septicaemia following abortion (Inquest)
3	24	—	yes	—	yes	Post-partum Eclampsia. Toxaemia of Pregnancy. Post-partum shock.
4	25	—	—	yes	—	Toxaemia of Pregnancy.
5	22	—	—	yes	—	Obstetric shock, toxaemia, pyelitis.
6	27	—	yes	—	yes	Hyperemesis
7	39	yes	—	—	yes	Eclampsia
8	34	—	yes	—	yes	Eclampsia. Toxic Myocarditis.

A survey of the causes of deaths shows that some are preventable provided that the mothers exercise the care which is necessary and make full use of the knowledge, skill and equipment which are available to them during pregnancy.

Many mothers now look upon ante-natal supervision as a necessary safeguard to their well-being during pregnancy and parturition, but there are still some who do not take the trouble to have regular supervision. The proportion of deaths due to septicaemia is lower, but the number of deaths due to toxaemia of pregnancy remains high.

(b) **Puerperal Infection.** The following is an analysis of the cases notified under the regulations :—

Case No.	Attendance	Removed to Hospital	End Result	Remarks
1	Doctor	No	Recovered	Forceps delivery ; Pyrexia 4 days.
2	Midwife	Yes	Recovered	Normal delivery ; Pyrexia ; In Hospital 2 months—Anaemia.
3	Midwife	No	Recovered	Normal delivery : Phlegmasia alba dolens.
4	Doctor	Yes	Recovered	Abortion at 5-6 months. Instrumental.
5	Doctor	No	Recovered	Normal delivery : Transient Pyrexia.
6	Hospital	Yes	Died	Septicaemia following abortion : Inquest
7	Midwife	Yes	Recovered	Torn perineum : Phlegmasia alba dolens
8	Midwife	Yes	Recovered	Normal delivery : Phlegmasia alba dolens.
9	Doctor	No	Recovered	Mastitis.
10	Ext. Mat.	No	Recovered	Forceps delivery : Pyrexia.
11	Hosp. Case	Yes	Recovered	Adherent Placenta : manual removal.
12	Midwife	Yes	Recovered	Adherent placenta : manual removal, rigor, Pyrexia for 2 weeks.
13	Midwife	No	Recovered	P.M. Septicaemia from throat with spontaneous abortion : no puerperal sepsis.
14	Midwife	Yes	Recovered	Normal delivery : Transient Pyrexia.
15	Midwife	No	Recovered	B.B.A. Post-partum haemorrhage : torn Perineum : Removed to Hosp.
16	Midwife	No	Recovered	Normal delivery : Pyrexia 14th day. Influenza.
17	Doctor	No	Recovered	Adherent placenta : manual removal : Post-partum haemorrhage.
18	Doctor	No	Recovered	Attended by handywoman : difficulty in third stage : Pyrexia several days
19	Doctor	Yes	Recovered	Forceps delivery : torn Perineum : consultant called.
20	Doctor	No	Recovered	Abortion 2½ months.
21	Doctor	No	Recovered	Primipara : normal delivery : Pyrexia tenderness in iliac fossa.
22	Doctor	No	Recovered	Forceps delivery : torn Perineum : Transient Pyrexia.
23	Doctor	No	Recovered	Normal delivery : B.B.A. Pyrexia several days.
24	Doctor	Yes	Died	Forceps delivery : torn Perineum Streptococcus—antitoxin given.

(c) **Provision of Midwives.**

The assisted midwifery scheme, which the council adopted in December, 1935, was in operation until August 1st, when the municipal midwives commenced their duties.

The assisted scheme was very popular and until the end of July, 138 applications had been received, of these 138, assistance was granted in 133 cases as follows :—

£1 1s. 0d. fee was granted in 128 cases.

10/6 „ „ „ 5 „

10/6 „ „ „ „ 2 cases where the cases
were sent to hospital.

On August 1st, when the municipal midwives commenced their duties, this scheme ceased to operate.

(d) Emergency Cases

Treated by doctors under Midwives Act.

In 197 cases, where a doctor was not previously engaged, medical aid was called by the midwife for the mother, infant or both. In 145 instances, the medical aid was for the mother for the following emergencies :—

Malpresentation	4	Engorged breasts	1
Uterine inertia.....	34	Varicose veins	3
Obstructed labour	3	Oedema of feet and legs	2
Contracted pelvis	2	Albuminuria	4
Ante-Partum haemorrhage	9	Psychosis	1
Adherent placenta	6	Vaginal tumour	1
Ruptured perineum	35	Mumps	1
Rise of temperature	10	Rash	1
Lacerated cervix	1	Baby born (no one present)	1
Post-partum haemorrhage	13	Ante-natal case	1
Sudden illness	1	Abscess breast	1
Chest conditions	4	Miscarriage	3
Maternal distress.....		3	

In 54 instances the medical aid was for the infant :—

Congenital debility and prematurity	20	Meningocele	1
Inflamed or discharging eyes	9	Deformed feet	1
Foetal distress	2	Rash	1
Convulsions	4	Bronchitis	2
Asphyxia	2	Hernia.....	1
Spina Bifida	3	Fractured arm	1
Hare lip and cleft palate	1	Swelling on chin	1
Abnormal scrotum	1	Sores	1
Congenital defect eye.....	2	Abscess breast	1
		Total	54

Hospital Accommodation for Maternity Cases.

The local authority pays for the use of 5 beds in the Princess Mary Maternity Hospital, Newcastle. The following is a summary of the Gateshead cases admitted to the hospital during the year :—

Live births	266	Perineal laceration	1
Still births	23	Peritonitis	1
Abortions	36	Chorea gravidarum	1
Ante-partum haemorrhage	3	Retained products	1
Puerperal pyrexia	5	Albuminuria	2
Hyperemesis Gravidarum	4	Pelvic cellulitis	1
Vaginitis	1	Pyelitis	3
Pre-eclamptic	1		

There are also 12 beds in the Maternity ward of the High Teams Hospital ; during the year there were 40 births in this institution.

Maternity Provision for Unmarried Mothers.

Cases of this type are admitted to the High Teams Institution provided by the Gateshead Public Assistance Committee. A few cases go to the Hostel for unmarried mothers, Newcastle.

(e) Assistance by Local Authority.

Consultant Service.

In order to assist in the reduction of maternal mortality, arrangements are in operation for the calling in of a consultant obstetrician by the medical practitioner for :

- (1) All cases of puerperal pyrexia or puerperal sepsis.
- (2) Any obstetric emergency in a patient who is unable to pay a consultant's fee.

The consultants were called five times under these arrangements.

Emergency Service.

During the year it was decided that Gateshead would participate in the scheme by which a consultant and a team of nurses could be called out to deal with obstetric emergencies in the homes of the patients, where patients were too ill for removal to hospital. There have not been any cases of this kind since the inception of the scheme.

The consultants available are :—

Dr. Ranken Lyle, Newcastle.

Dr. Farquhar Murray, Newcastle.

Mr. Harvey Evers, Newcastle.

Mr. F. E. Stabler, Newcastle.

Home Helps.

After the municipal midwifery scheme was commenced it was decided to employ the services of two home helps.

Only one of these was employed on one case up to the end of the year.

Midwifery Outfits.

Midwifery outfits containing clothing and bed linen necessary for both mother and infant are loaned out from the ante-natal clinic.

During the year 39 patients availed themselves of these outfits.

(f) Municipal Midwifery Scheme—(Midwives Act, 1936).

In the report for last year full details were given of the financial workings of this scheme and of the conditions of appointment of the municipal midwives. Early in the year nine of the midwives who had the largest practices in the Borough were appointed to be municipal midwives. In addition five trained nurse midwives were provided by the Nursing Association. On August 1st, the day appointed by the Ministry of Health for the commencement of this work, the municipal midwives started work as full time servants of the corporation.

A scheme of booking had been in operation for the two months previously, so as to keep the number of cases booked to each midwife down to eight per month, which was the number agreed upon at the outset.

All cases are booked both for the District Nurses and Municipal Midwives, through the central office at Greenesfield House by a booking nurse. People who do not wish to attend in person to book, do so by telephone or letter and send in the necessary form by post.

A free choice of midwife is allowed as far as possible ; but when a midwife is fully booked for the month in question a further choice has to be made ; if the person wishing to book a certain midwife is found to live too far away from the midwife in question, the patient is then requested to make a further choice. Although the midwives have not been allotted districts with arbitrary dividing lines between them, they are kept to a certain extent in districts. It was felt that to make definite districts would interfere with the working of the scheme, whereas, to allow the midwife to take cases in any part of the town would interfere badly with her work in nursing the cases afterwards, so the intermediate course has been adopted, and has worked very well.

In order to arrange " off duty " times, the midwives work in pairs except at Low Fell, where three midwives share the work among them.

Off duty time is arranged so that each midwife has one week end in three off and a whole day each week except the week when she has the week-end. This off-duty is subject to the exigencies

of the work but up to the end of the year only one midwife has had to forego her day off ; this was made up to her at a later date.

When the scheme had been working for a short time it was found that some of the midwives were undertaking too many " nursings " in a session for the work to be done satisfactorily ; this was due to the fact that although the number of cases for each midwife was limited, the cases are not always spread evenly over the whole month. It has now been arranged that any midwife who finds that she has more than four or less than two " nursings " in hand, telephones the central office and the additional work is apportioned out.

The midwives attend in turn at the ante-natal clinics, so that they can see their own cases under better conditions than would be possible otherwise.

The following is a summary of the work done by the municipal midwives :—

	No. of Cases		No. of Morning Visits	No. of Evening Visits	Ante-Natal Visits
	Attended as Midwife	Attended as Maternity Nurse			
1	26	10	561	103	131
2	26	18	539	146	154
3	46	4	643	141	84
4	28	11	458	91	120
5	42	6	596	95	147
6	42	—	409	108	166
7	30	8	546	128	103
8	23	23	492	175	57
9	30	9	460	134	115
Total	293	89	4,704	1,121	1,077

The District Nurse Midwives are not booked individually, but take the cases in turn. The following is a summary of the work done by them :—

	No. of Cases		No. of Morning Visits	No. of Evening Visits	Ante-natal Visits
	Attended as Midwife	Attended as Maternity Nurse			
	124	73	2721	754	716

The following is a synopsis of the above cases :—

	No. of Cases		
	Live Births	Still Births	
Municipal Midwives	382	370	12
District Nurse Midwives	197	193	4
	—	—	—
	579	563	16
	—	—	—

There were no maternal deaths among these cases.

There were seven cases of puerperal pyrexia among the above cases ; but none were of a serious nature.

In 102 cases, where a doctor was not previously engaged, medical aid was called by the municipal midwives or the district nurse midwives for the mother, infant or both.

In 74 instances, the medical aid was for the mother for the following emergencies :—

	<i>Municipal Midwives</i>					<i>District Nurses</i>
Uterine inertia	1	—
Prolonged labour...	6	7
Adherent placenta	1	3
Ruptured perineum	13	9
Rise of temperature	4	3
Ante-partum haemorrhage	1	2
Post-partum haemorrhage	2	4
Albuminuria	2	2
Psychosis	1	—
Pain in left leg	1	—
Rash	1	1
Threatened miscarriage	1	1
Inflammation of vein	1	—
Vaginal tumour	1	—
Swelling of feet and legs	1	—
Ante-natal examination	1	—
Mumps	1	—
B.B.A.	—	1
Chest condition	—	2

In 29 instances the medical aid was for the infant.

	<i>Municipal Midwives</i>					<i>District Nurses</i>
Dangerous feebleness	2	4
Unsatisfactory condition	9	2
Spina Bifida	1	—
Sores	1	—
Discharging eyes	3	1
Asphyxia	1	1
Bronchitis	1	—
Convulsions	1	1
Hernia	1	—

The district nurse-midwives take all emergency cases, that is cases where people have neglected to book anyone for the confinement. The arrangements for all cases are that the midwife, whether acting as midwife or maternity nurse, attends each case for 14 days making a morning visit every day and one evening visit for the first three days or more if necessary.

The midwife is expected to render the account for her work before she leaves the case on the fourteenth day. She collects the fee and pays it to the Treasurer. If she remains unpaid at the conclusion of her attendance, the card for the case is transferred to the Borough Treasurer's department and the onus is then on that department to collect the fees.

The following statement is of fees paid from August 1st to end of year :—

	£	s.	d.
Fees collected by midwives or paid at Health Department ...	488	15	0
Fees collected by Borough Treasurer's Department	38	18	0
	£527	13	0
Amount outstanding	£29	17	0

6. POST NATAL CARE.

Up to the present time it has not been possible to commence a post-natal clinic owing to shortage of staff and lack of facilities in the building in use. It is hoped to commence this clinic in the summer as soon as the new clinic is in full use.

A few post-natal cases have been seen at the ante-natal clinics.

7. INFANTILE MORTALITY.

There were 161 deaths under one year of age, giving an infantile mortality rate of 77 per 1,000 live births, and showing a decrease of 14 from last year.

It is very satisfactory to be able to report a decrease in the infant mortality rate, and once again there is the welcome decrease in the neo-natal deaths, which were again less than the deaths among infants over one month.

It is only since the Birthday Trust Fund have provided additional foodstuffs for the expectant mothers, and those same mothers have had extra ante-natal supervision that this decrease in the deaths has been noticed. The 72 neo-natal deaths are also considerably less than last year, when there were 93 deaths in infants under one month.

Of these 52 or 72.2% were due to premature birth, injury at birth and congenital conditions. Prematurity played a great part in the production of deaths of infants under one month. Of the 72 deaths, 26 were due to premature birth, and of these 21 died in the first week of life.

County Borough of Gateshead

INFANTILE MORTALITY per 1,000 live births

1871-1937

AVERAGE INFANTILE MORTALITY RATES

1871-1880
172

1881-1890
161

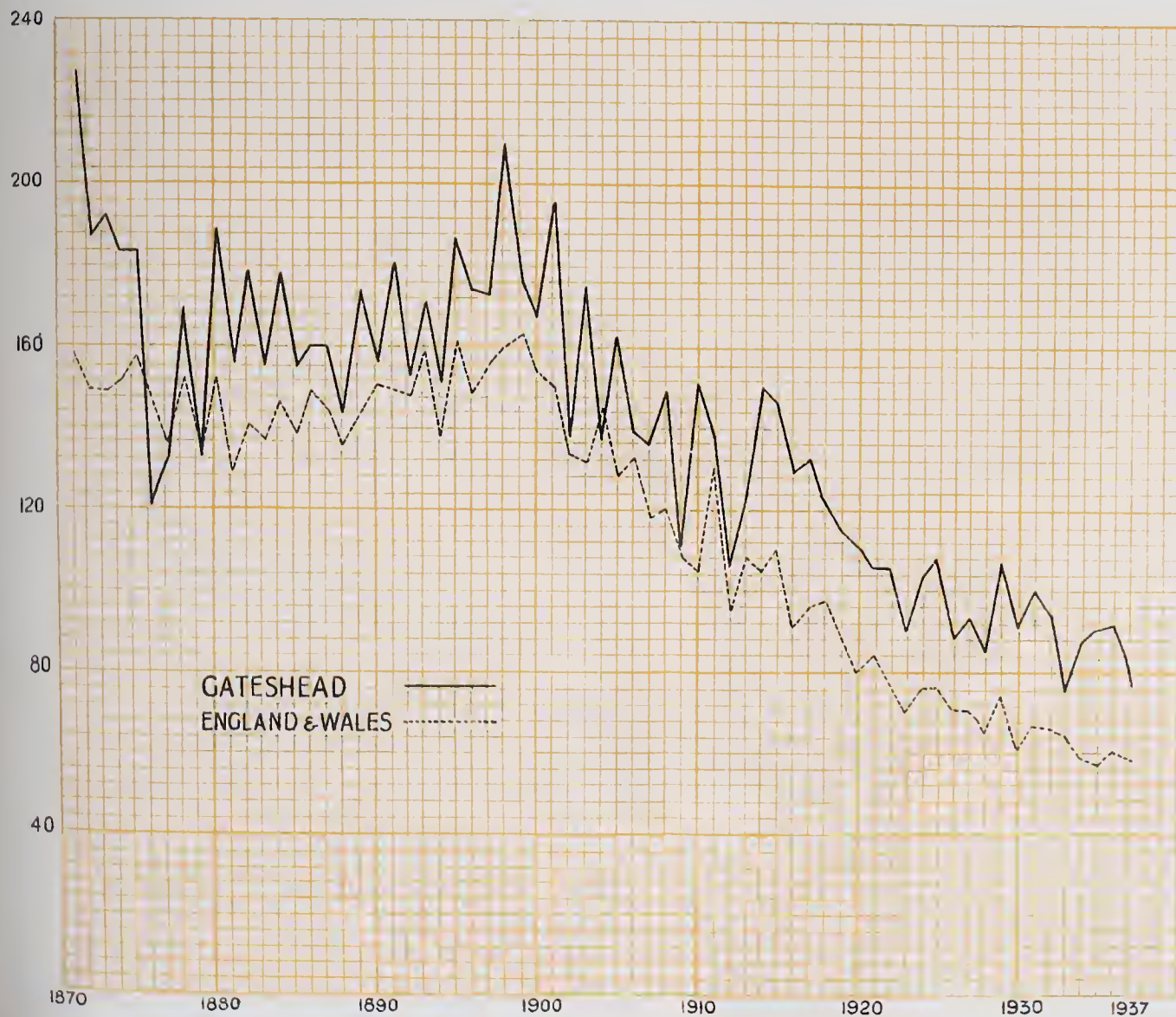
1891-1900
174

1901-1910
149

1911-1920
127

1921-1930
96

Rate per
1,000 live
births



The results obtained among the mothers who have benefited by the Birthday Trust Fund are very encouraging. It would appear that the way to reduce the deaths among the infants under one month is in the education and care of the mother during pregnancy and parturition, together with the provision of adequate nourishment for the expectant mother.

As regards the deaths among children over one month, there were very few from infectious disease due to the absence of measles or whooping cough during the year ; the majority of the deaths were due to infections of the respiratory system.

It had been hoped that cases of pneumonia would be nursed in the isolation hospital, but a very serious epidemic of diphtheria strained the capacity of the hospital to its limits, and no provision could be made for cases of pneumonia ; however the extensions to the hospital are now in process of erection and it is hoped that the situation will be eased when the extension is opened.

The following table gives the Infantile Mortality Statistics for each ward :—

Ward.	Total No. of deaths Under 1 year	No. under 1 month.	Infantile Mortality Rate.
North	14	4	64
North East	18	7	88
North West	29	13	87
Central	11	4	65
East Central	24	9	103
South Central	3	2	23
West Central	8	4	46
East	26	13	101
South	17	10	86
West	11	6	59
	<u>161</u>	<u>72</u>	<u>77</u>

Infantile Mortality during the four quarters :—

	Total No. of Infant Deaths	Percentage
1st quarter	35	21.7
2nd „	45	28.0
3rd „	28	17.4
4th „	53	32.9

INFANTILE MORTALITY DURING THE YEAR 1937

Nett Deaths from stated Causes at various Ages under 1 year of Age.

CAUSE OF DEATH.		Under 1 week.	1—2 weeks.	2—3 weeks.	3—4 weeks.	Total under four weeks.	1—3 months.	3—6 months.	6—9 months.	9—12 months.	Total Deaths under 1 year.		
All Causes	Certified	46	9	8	6	69	24	26	25	12	T. 156	M. 92	F. 64
	Uncertified	2	—	—	1	3	1	1	—	—	5	4	1
Smallpox		—	—	—	—	—	—	—	—	—	—	—	—
Chicken Pox		—	—	—	—	—	—	—	—	—	—	—	—
Measles		—	—	—	—	—	—	—	—	1	1	1	—
Scarlet Fever		—	—	—	—	—	—	—	—	—	—	—	—
Whooping Cough		—	—	—	—	—	—	—	1	2	3	2	1
Diphtheria and Croup ...		—	—	—	—	—	—	—	—	1	1	1	—
Erysipelas		—	—	—	—	—	1	1	—	—	2	1	1
Tuberculous Meningitis		—	—	—	—	—	—	—	—	1	1	—	1
Abdominal Tuberculosis		—	—	—	—	—	—	—	—	—	—	—	—
Other Tuberculous		—	—	—	—	—	—	—	—	—	—	—	—
Disease		—	—	—	—	—	—	—	—	—	—	—	—
Meningitis—Not Tuber-		—	—	—	—	—	1	—	—	—	1	1	—
culous		—	—	—	—	—	—	—	—	—	—	—	—
Convulsions		—	—	—	—	—	—	—	—	—	—	—	—
Laryngitis		—	—	—	—	—	—	—	—	—	—	—	—
Bronchitis		1	—	—	—	1	2	6	2	—	11	6	5
Pneumonia		—	1	—	2	3	7	12	8	6	36	23	13
Diarrhoea		—	—	—	—	—	1	—	—	—	1	—	1
Enteritis		—	2	4	1	7	2	4	3	1	17	11	6
Gastritis		—	—	—	—	—	—	—	—	—	—	—	—
Syphilis		—	1	—	—	1	1	—	1	—	3	3	—
Rickets		—	—	—	—	—	—	—	—	—	—	—	—
Suffocation (overlying)		—	—	—	—	—	—	—	—	—	—	—	—
Injury at Birth		5	1	—	1	7	—	—	—	—	7	3	4
Atelectasis		1	—	—	—	1	—	—	—	—	1	1	—
Congenital Defects		7	1	—	—	8	5	1	—	—	14	7	7
Premature Birth		21	1	3	1	26	2	—	—	—	28	13	15
Atrophy, Debility and		—	—	—	—	—	—	—	—	—	—	—	—
Marasmus		8	—	1	—	9	1	—	1	—	11	8	3
Other Causes		5	2	—	2	9	2	3	9	—	23	15	8
TOTALS		48	9	8	7	72	25	27	25	12	161	96	65

8. CHILD WELFARE CENTRES.

The following summarises the work done at various centres during the year :—

Centre	No. of Sessions	First Visits of Infants 0-1 year	Re-visits of infants 0-1 year	First visits of children 1-5 years	Revisits of children 1-5 years
Greenesfield House	98	764	3195	454	2153
Bensham	98	599	3340	301	1595
Low Fell	49	325	2520	255	1513
Moore Street	48	347	1839	202	1303
Victoria Road	50	244	1473	114	811
Wrekenton	26	54	305	59	509
	369	2333	12672	1385	7884

Centre	Total No. of attendances	Average Attendance at Drs. Session	Average Attendance at Nurses Session	Infant Examinations by Medical Officer	Average No. of Consultations per Session
Greenesfield House	6566	89.89	45.0	2003	41.73
Bensham	5835	62.48	56.47	1647	32.94
Low Fell	4613	94.1	—	1289	26.3
Moore Street	3691	76.89	—	1506	31.37
Victoria Street	2642	52.84	—	1010	20.2
Wrekenton	927	35.6	—	415	15.9
	24274	71.2	50.6	7870	29.0

This is the first full year for the Victoria Road Centre, where the attendances have averaged over fifty per session throughout the year.

This centre is in the midst of a rehousing area for slum clearance and is supplying a very urgent need.

After the health visiting staff has been increased an extra session is to be commenced at Low Fell which is a very crowded centre.

The experiment of having senior girls attending at the Moore Street Infant Welfare Centre for instruction in mothercraft was continued this year. The girls have been very interested and are very enthusiastic about the work.

At this centre a knitting competition was held in November, when the Mayoress, Mrs. W. J. Pickering, kindly presented the prizes.

It will be noticed that the total number of attendances at the Centres during the year was 24,274 against 21,980 last year.

Every child receiving dried milk is expected to be brought to the Centre once a month, so that progress may be noted ; some children are brought much more frequently.

Voluntary Workers.

As in previous years, the voluntary workers have rendered great assistance at all the centres ; their services are very much appreciated. These ladies give up a great deal of their time to the work and attend regularly every week or fortnight as they arrange among themselves.

Some of them make tea for the mothers, while others assist with the clerical work ; they also try to interest the mothers in sewing and knitting for their children, and give a good deal of helpful instruction on these matters.

9. THE NURSERY SCHOOL.

The Nursery School at Bensham Settlement, which is run by a voluntary association, has 55 children on the register.

The reasons given for their admission to the school are as follows :—

Children admitted for health reasons	1
Children of widowed or working mothers.....	18
Children with Tubercular family histories	1
Children admitted because of unemployment or difficult home circumstances ; <i>e.g.</i> , living in one or two roomed house on main bus routes	15
Children from large families or with young babies	14
Mother in ill-health	6

An addition has been built to the Nursery School, and it will be able to accommodate more children during 1938.

The school has its own Medical Officer, who examines the children periodically ; the cards from these inspections are sent to the health department when the child is 5 years old, and are then sent on to the elementary school at which the child attends ;

thus a continuous record is kept. Under certain very exceptional circumstances a few children are kept in the Nursery School who are of school age ; but only after examination by one of the staff of the Health Department.

The children are very well cared for, getting regular meals and regular rest periods. Much of their play is out of doors when the weather permits. These schools do a great deal of good, and the work might usefully be extended so that the children being moved from slum clearance areas to the new estates might be able to attend a nursery school incorporated in the new estate.

10. SUPPLY OF DRIED MILK AND OTHER FOODSTUFFS

During the year, dried milk has been supplied at Bensham, Moore Street, Victoria Road, Low Fell and Wrekenton Centres, as well as at Greenesfield House.

The sub-committee of the Maternity and Child Welfare Committee continues to meet regularly to investigate the applications for assisted milk supply, and careful consideration is given to the circumstances of each case.

During the year, 88,397 packets of dried milk were distributed, 8,878 being at cost price and 79,519 packets at prices below cost price according to the family income.

In addition, Virol, Maltoline, etc. was supplied at cost price. A table is set out below showing the amounts of each article sold.

Receipts amounted to £3,384 9s. 7d $\frac{1}{2}$. against a cost of £5,897 19s. 11 $\frac{1}{2}$ d.

SALE of 1 lb. Packets of Dried Milk and of other Foodstuffs at Welfare Centres.

	Greenes- field	Bensham	Sunder- land Road	Low Fell	Wrek- enton	Victoria Road	Total
1/4	2003	1984	792	2064	213	280	7336
1/3	488	355	265	316	42	76	1542
10d.	2087	1009	1048	910	175	425	5654
9d.	1023	201	102	241	157	235	1959
7d.	24756	5994	5341	3242	815	6145	46293
6d.	17121	1645	2886	1149	439	2342	25582
3d.	11	20	—	—	—	—	31
	47489	11208	10434	7922	1841	9503	88397
$\frac{1}{2}$ lb. Virol— 9d.	3408	1492	804	1474	322	447	7947
$\frac{1}{2}$ lb. Malto- line 6d.	2293	339	242	261	87	255	3477
$\frac{1}{2}$ lb. Numol 7d	1825	472	401	541	133	358	3730
1 lb. Malt & Oil 6d.	112	11	—	—	1	—	124
1 lb. Malt & Oil 6 $\frac{1}{2}$ d	51	5	—	—	—	—	56
1 lb. Malt Ext. 6d.	36	1	—	—	—	—	37
1 lb. Malt Ext. 6 $\frac{1}{2}$ d	3	—	—	—	—	—	3
Secway 1/- ,, 7d.	4	—	—	—	—	—	4
	10	—	—	—	—	—	10
	7742	2320	1447	2276	543	1060	15388

11. INFANT LIFE PROTECTION.

(Children's Act, 1908, and Part V. of the Children and Young Persons Act, 1932).

On 1st January, 1937, there were 12 children registered, 6 males and 6 females.

During the year 3 additions were made to the register and 11 children removed for the following reasons :—

Transferred to mother	3
„ „ relatives	2
„ „ orphanage.....	1
Legally adopted	1
Removed from district	2
Removed from foster parents by order of the court	1
Over age	1

At the end of the year there were 4 children on the register, 2 males and 2 females.

The N.S.P.C.C. Inspector works in close co-operation with the officials in the various branches of this department, and gave great assistance in the case where a child was removed from foster parents, who were proving unsuitable. The child was removed to the High Teams Institution, and was later handed over to the mother.

12. Ophthalmia Neonatorum.

There were 6 cases notified during the year, and none were considered sufficiently bad to require hospital treatment. They were all treated at home, the health visitors attending each day to treat the eyes. Gonococci were not found in any case, and the vision was unimpaired in all cases.

13. HOSPITAL TREATMENT FOR AILING CHILDREN.

Children found at the Infant Welfare Centres to be suffering from defects are sent to :—

- (a) The Children's Hospital, Gateshead.
- (b) The Babies' Hospital, Newcastle.
- (c) The Royal Victoria Infirmary, Newcastle.

182 children were referred to the Children's Hospital, Gateshead, for the following reasons :—

Enlarged Tonsils and Adenoids	30
Phimosis.....	68
Carious Teeth	39
Otorrhoea	8
Umbilical or Inguinal Hernia	16
For Sunray Treatment	14
Minor Injury.....	2
Miscellaneous.....	5

3 babies were sent to the Babies' Hospital for operations, all suffering from Pyloric Stenosis. During the year 30 Gates-head infants were admitted to this hospital, 6 of them being accompanied by the mother.

Below is a classification of the cases treated :—

Intra cranial birth injury.....	1
Infective gastro-enteritis	2
Congenital pyloric stenosis	7 (Surgical)
Sepsis and its effects	7
Feeding difficulties	4
Pneumonia	5
Hare lip	2
Meningitis	2

10 were discharged cured.
11 were discharged improved.
3 no improvement.
6 died.

29 children were sent to the Royal Victoria Infirmary for the following reasons :—

Strabismus	14
Meibomian Cyst	1
Orthopaedic cases	6
Naevi	7
Otorrhoea	1

During the year it was decided that the children under five could participate in the same treatment arrangements as school children. Under this scheme the following cases have been treated.

Dental cases	14
Refractions	10

Of these children submitted to refraction, 9 were ordered spectacles and have since obtained them.

35 children were treated for minor ailments and made 124 attendances.

Skin Conditions.

Scabies	3
Impetigo	11
Septic sores	9
Eczema	1
Burns	3
Lacerations	2
Otitis Media	3
Diphtheria "carriers"	2
Coryza	1

Orthopaedic Cases.

During the year one child was admitted to the Sanderson Orthopaedic Hospital School, Gosforth, suffering from very severe rickets.

The child, who was admitted in the previous year with Talipes, was discharged very much improved.

The joint scheme for orthopaedic work mentioned last year, will commence next summer after the new clinic has been opened.

14. SPECIAL ENQUIRY ON DIET OF EXPECTANT MOTHERS.

In August, 1937, Dr. R. A. McCance, of the Biochemical Department, King's College Hospital, London, asked if he might be afforded facilities to investigate the diets of 30 pregnant women of the area. The Health Department agreed to collaborate in this research and asked that the local results be made available for publication in this report.

32 expectant mothers, including primiparae and multiparae, and as far as possible living in the same district, were chosen from the patients of the ante-natal clinics. Wives of employed and unemployed men were included. The women were selected to a certain extent, from the point of view of their ability to co-operate with the investigators sent from London. Each selected woman freely gave her consent to the research and was provided with a balance for weighing each article of diet and also with sheets on which she recorded in detail her individual daily intake of all foodstuffs, over a period of 7 days. At the end of the period, the diet sheets were collected and Dr. McCance and his co-investigators worked out, *inter alia*, the quantities of different foodstuffs consumed, and also the amounts of protein, carbohydrates and fat in the diet and the total calories available therefrom. The detailed results will be published shortly.

By the kindness of Dr. McCance, who has provided us with his findings in respect of the individual women, it has been possible, through our records, to correlate these with the financial circumstances of the household.

These two aspects are therefore brought into conjunction in the table given herewith. In reading the table it has to be borne in mind that the minimum daily requirement in calories for the average adult non-pregnant woman given by most physiologists, is in the region of 2,800 calories. It is further agreed that the minimum daily quantity of protein necessary for an adult should be 100 grams, and it is usually accepted that 100 grams of fat per day is also necessary. The remainder of the daily calories is made up by carbohydrates.

It is generally recognised that continual failure to receive the daily minima of calories and of protein is bound to result in some degree of malnutrition, which may not go so far as actual illness.

In the case of pregnant women, it is obvious that additional protein will be required in the diet, for the growth of the child in the womb.

DAILY DIET OF 32 GATESHEAD EXPECTANT MOTHERS.

No.	Month of Preg-nancy	Hus-band Em-ployed	Weekly Income	No. in House hold	W'kly Rent Paid	Aver. per head (de-duct. Rent)	Daily Diet				Remarks
							Grams			Daily Cal-ories	
							Total Pro-tein	Total Fat	Total C'byhd Rates.		
1	4th	No	£1 6 0	2	5/-	10/6	76	81	208	1918	Miscarriage at 5th month Live child, normal delivery
2	5th	No	£1 9 0	3	4/10	8/-	47	54	184	1449	
3	6th	No	£1 9 6	3	8/6	7/-	79	107	323	2643	do. do.
4	6th	No	£1 10 0	4	5/9	6/-	86	92	338	2594	do. do.
5	6th	No	£1 14 0	5	8/3½	5/1½	40	42	236	1522	do. do.
6	6th	No	£1 18 0	6	11/2	4/5½	78	98	356	2691	do. do.
7	6th	No	£1 9 0	3	6/-	7/8	46	64	309	2051	do. do.
8	6th	No	£1 5 0	2	7/4	8/10	103	114	318	2786	do. do.
9	7th	Yes	£2 5 0	5	7/9	7/5	28	60	156	1312	do. do.
10	7th	Yes	£2 5 0	5	7/7	7/5	52	51	238	1663	do. do.
11	7th	No	£1 18 0	7	8/6	4/2	66	83	275	2170	do. do.
12	7th	No	£1 9 0	3	7/-	7/4	46	76	195	1695	do. do.
13	7th	Yes	£2 9 1	4	10/-	9/9	85	93	314	2501	do. do.
14	7th	No	£1 9 0	3	8/1	7/-	65	90	294	2309	do. do.
15	7th	No	£1 15 6	5	5/-	6/1	70	81	230	1983	do. do.
16	8th	No	£1 12 0	4	5/6	6/7	47	47	182	1376	do. do.
17	8th	No	£1 15 0	5	7/-	5/7	63	93	271	2234	do. do.
18	8th	Yes	£2 0 0	4	7/1	8/3	48	56	271	1829	do. do.
19	8th	No	£1 19 8	4	5/-	8/8	73	89	335	2501	do. do.
20	8th	No	£1 12 0	4	6/9	6/3	97	100	326	2664	do. do.
21	8th	No	£1 11 0	4	4/-	6/9	77	81	285	2238	do. do.
22	8th	No	£1 6 0	2	5/-	10/6	66	87	304	2326	do. do.
23	8th	No	£1 14 6	3	7/-	9/2	50	62	174	1495	do. do.
24	8th	No	£2 1 0	7	6/-	5/-	69	71	411	2628	do. do.
25	8th	No	£1 12 0	4	6/2	6/5	64	83	269	2137	do. do.
26	8th	Yes	£2 0 0	5	12/6	5/6	51	87	199	1834	do. do.
27	8th	Yes	£2 0 0	2	7/6	16/3	95	96	396	2906	do. do.
28	8th	Widow	£2 15 4	8	14/-	5/2	77	113	266	2457	do. do.
29	9th	No	£1 15 0	6	10/-	4/2	59	50	237	1679	do. do.
30	9th	No	£3 1 6	9	6/11	6/-	56	68	292	2059	do. do.
31	9th	No	£2 1 0	7	10/6	4/4	53	90	236	2022	do. do.
32	9th	No	£1 6 0	2	8/-	9/-	90	95	363	2741	(died at six months) do. do.

The main conclusions to be drawn from the above table are first of all that the minimum daily calorie value of the diet was only reached in one case and that as many as 12 of the 32 women received less than 2,000 calories a day, while 5 actually received less than 1,500. Generally speaking too, where the daily calories were low, the amounts of protein and fat in the diet were also low.

The wives of men in employment at the time of the investigation, were not distinguished by having a diet of relatively higher calorie content than the wives of unemployed men, nor was the fulfilment of the food requirements related directly to the actual money available (average per head) for the food of the household.

It must be admitted however, that the gross income and the average income per head of the households of the women studied in this investigation were nearly all deplorably low. Nevertheless it is obvious that many of the women do far better with the limited means available than others with similar or better weekly incomes. Such a result brings in the factor of maternal efficiency and knowledge. The size of the family too, would seem to be of little influence in the ultimate dietetic result on the mother.

It is interesting to note that with one exception the babies were all born alive and that delivery was normal. There were no neo-natal deaths and the birth weights of the infants as far as traced were quite satisfactory.

MARGARET B. HERBST, M.D., B.Hy., D.P.H.,
Deputy Medical Officer of Health.

D. SCHOOL MEDICAL SERVICE.

There are 32 primary schools and one secondary school within the Borough, providing 25,902 and 650 school places respectively.

The Joicey Road Open Air School, providing 150 places for delicate and defective children, was opened in May, 1937.

The number of elementary children on the rolls in 1937 was 18,062 and of secondary pupils, 598, while the average number in attendance was 16,648 elementary and 575 secondary children.

The two junior instruction centres which are covered by the arrangements for school medical service have an average daily attendance of 130 males and 130 females. The individual juveniles in attendance are constantly changing.

E. ORTHOPAEDIC SCHEME.

The Borough Council is not yet in a position to carry out a comprehensive scheme for the treatment of orthopaedic defects except in the case of tuberculous bone and joint disease, which is treated in various Sanatoria.

The main burden of orthopaedic care therefore rests on the voluntary hospital facilities and the hospital almoners of the district, although every effort is made by the health services of the Borough to co-operate and assist in the provision of appliances.

The Gateshead Orthopaedic Scheme will be initiated on the completion of the new health centre and it provides for hospital accommodation at the W. J. Sanderson Orthopaedic Hospital School, Gosforth, the services of an orthopaedic specialist to hold clinics in the Open Air School and in the new Health Centre approximately once a month, and the part-time services of a fully qualified orthopaedic nurse.

F. NATIONAL HEALTH INSURANCE.

I am indebted to Mr. A. Morris, Secretary to Gateshead National Health Insurance Committee for the following information relative to the year ended 31/10/37.

There were 47,900 insured persons on the Index Register, an increase of 884 on the previous year.

The numbers on the doctors' lists for the last ten years were as follows :—

1928	45,189	1933.....	47,075
1929	45,797	1934.....	44,372
1930	45,884	1935.....	42,750
1931	46,135	1936.....	44,289
1932	46,785	1937.....	45,292

There were 74 doctors under agreement with the Committee, of whom 29 have more than 500 persons on their lists. There are likewise 40 firms of druggists under agreement to supply drugs. The frequency of prescribing in 1936 was 5·9 per insured person, and the average cost of this 45·4 pence.

G. PUBLIC ASSISTANCE MEDICAL SERVICE.

The work done by these officers in 1937 was as follows :—

	<i>Men</i>	<i>Women</i>	<i>Children</i>	<i>Total</i>
Received Medical and Outdoor Relief.....	1781	2758	1318	5857
Received Medical Relief only	540	1008	1378	2926
	2321	3766	2696	8783

This service has grown enormously within the last 7 years as shown by the table below :—

<i>Year</i>	<i>Persons relieved</i>	<i>Year</i>	<i>Persons relieved</i>
1937	8783	1934	8941
1936	9193	1933	7492
1935	8035	1932	5464
		1931	4016

In-patient treatment is given principally in the medical wards of High Teams Institution or in a few cases for urgent operation at the Royal Victoria Infirmary, Newcastle. Certain other cases requiring specialist surgery are dealt with at Newcastle General Hospital.

H. GATESHEAD DISPENSARY.

This institution, situated in West Street, is provided by voluntary subscription for the poor of the town, whom it has served since 1832. There are two resident medical officers employed full time in serving the medical needs of the sick poor. Patients are seen at the dispensary and in their homes, and a large number of patients who would otherwise receive no medical attention are dealt with.

I am indebted to Dr. J. C. Hall, Resident Medical Officer for the information in respect of 1937. There were 2,496 letter patients, (1,182 home patients and 1,314 out-patients) and 20,017 casual patients, including 523 accident cases, a grand total of 22,513 patients treated, as compared with 24,180 last year.

The letter cases are sent by subscribers to the number of 4 per subscription of one guinea, while casuals are charged a fee of 3d. per attendance (inclusive of medicine and dressings). The types of patient dealt with are children with acute illness and women with acute and chronic disease.

The Public Assistance Committee gave a donation of £20 in 1937.

Harmonious relations are maintained between the dispensary staff and the staff of the health department.

I. GATESHEAD PUBLIC MEDICAL SERVICE.

Gateshead has been served since 1925 by a Public Medical Service, established by the doctors of the town for the dependants of insured persons and others unable to pay the usual fees of medical practice. Thirty-two practitioners of the area are partners in the scheme, the administrative details of which are in the hands of the Secretary, Mr. John Mitchell, to whom I am indebted for this account.

The terms for subscribers are 6d. per week per adult with an additional 1d. for each child up to a maximum of 9d., and an additional 4d. per week for each additional adult over the age of 16 years. If children alone are paid for, the rates are 4d., 5d. and 6d. per week according to whether one, two or three or more children are covered by the scheme.

Any subscriber is quite free to choose his doctor and may change him at any time by notifying the Central Office at 9, Walker Terrace.

Subscribers are entitled to ordinary medical general practitioner treatment (including drugs), but the service does not cover obstetrical help or specialist assistance of any kind, nor does it extend to certification or the provision of tonic foodstuffs.

At the end of the year, 15,500 persons were covered by the scheme.

J. HOME NURSING SERVICE.

The Gateshead District Nursing Association employs 1 superintendent nurse, 1 assistant superintendent nurse, 12 nurses and 5 nurse midwives, all of whom are state registered, and live in the Association's Nurses' Home, Coatsworth Road, Gateshead. This home was extended in 1937 so as to provide living quarters for the midwives and it also includes premises for use as an ante-natal clinic.

The 5 nurse midwives employed form part of the local authority's provision of midwives under the Act of 1936.

From shortly before the 1st August, 1937, to the end of the year the district nurse midwives attended altogether 211 cases, paying 4 401 visits. Further information as to the work of the Nursing Association's midwives is contained in the Maternity and Child Welfare Section of this report.

The home nursing service, maintained for medical and surgical nursing in the home, takes up the time of the 12 nurses and I am indebted to Mr. C. D. Pike, Honorary Secretary of the Association for the following information in regard to the year 1937.

Altogether 1,535 cases were nursed, entailing 39,800 visits to the homes of the sick. Of the cases attended at home, 861 were referred by private practitioners, 290 by friends of patients, 87 by district medical officers and 126 by dispensary doctors. Nursing appliances were loaned to 600 cases.

At the Gateshead Dispensary the staff of the Association administered 8,328 treatments. Included in the above are 3,580 visits to nurse 153 cases of notifiable disease under treatment at home by the family practitioners. This figure includes 1,394 visits to 41 tuberculous patients, 1,707 visits to 104 pneumonia cases, 20 to 5 patients with erysipelas and 18 visits to cases of influenza.

The Association provides a Home Nursing Provident Scheme, whereby Borough residents, unable to pay for the services of a private nurse, contribute small weekly donations to the Association, in return for which the Association provides a visiting

nurse when required by the practitioner in attendance on an illness. There are roughly 10,000 subscribers. Non-subscribers are charged 1/6d. per visit of a nurse. The Public Assistance Committee gives a donation of £100 per annum.

The visits paid to sick persons were classified as follows :—

Provident members	...	...	...	22,885
Necessitous cases (Free)	...	...	...	11,667
Paying Patients	...	...	...	135
Dispensary patients	...	...	...	3,173
Public Assistance Cases	...	...	...	1,940

The most harmonious relations are maintained between the Gateshead District Nursing Association and the Health Services of the Council. The officials concerned have found the Secretary and Matron of the District Nursing Association to be ever ready to co-operate in attention to the sick of the town.

K. AMBULANCE PROVISION.

For infectious cases, the town provides two ambulances. The older wagon a Ford, is mainly used for scarlet fever, while the new ambulance, a Morris 24 h.p. with a special body, is reserved for the removal of other cases, including tuberculosis. The ambulances made 920 runs, removing 864 patients to Sheriff Hill Hospital, 53 to Whinney House, 2 to Barrasford, 5 to Stanhope, 12 to Wolsingham and 18 to other institutions.

Pending the extension of the fever hospital, the Morris Ambulance is housed in a garage at Bloomfield House, which is leased from the Education Committee and the Ford ambulance is kept at Greenesfield House.

The Public Assistance Institution is served by a Morris Ambulance of the modern type and these new Corporation ambulances are essentially designed for the comfort of the transported.

The Gateshead Police have an ambulance reserved mainly for street accidents and illnesses and there is a utility van also available for use as an ambulance.

The Public Assistance ambulance is not available for members of the public for transportation of the sick to hospital. The ambulance under the control of the Chief Constable is utilised on a customer basis by public works in the area or adjacent thereto.

A colliery ambulance, provided by a firm outside the Borough is available for the employees of a pit situated within the Borough in case of accident, while a large private firm within the Borough provides an ambulance for its injured employees and also ambulance transport for sick employees from their homes to hospital if necessary.

There are three private firms providing ambulance transport for Borough patients at definite charges. One of these firms runs a provident scheme.

When the hospital accommodation envisaged elsewhere in this report, has been provided, it will be possible to centralise the ambulance provision of the Local Authority.

L. LABORATORY SERVICE.

The Public Health Department provides within the Tuberculosis Dispensary Building, a laboratory with incubator, microscope, centrifuge, etc., for the carrying out of the routine bacteriological tests associated with health administration. The Tuberculosis Clerk devotes part of his time to assistance in the laboratory.

The following is a summary of the valuable work performed in the public health laboratory in 1937 :—

	Positive.	Negative.	Total.
Swabs for diphtheria bacilli	1172	2949	4121
Swabs for streptococci	—	1	1
Sputa for tubercle bacilli.....	163	511	674
Cerebro-spinal fluids for organisms	18	21	39
Blood for agglutination tests	2	7	9
Smears for gonococci	2	31	33
Sputa for pneumococci	4	1	5
Pus for organisms	—	—	10
Urine for microscope examination	—	—	19
Miscellaneous.....	—	—	7
	Total	...	4918

Informal tests by the Gerber centrifugal process were made by the Sanitary Inspector of the fat content of 70 samples of milk, of which 7 were found to be deficient and thereafter formal samples were taken.

The more intricate analytical and bacteriological tests are carried out on a customer basis by the public analyst and by the Durham University College of Medicine Bacteriological Laboratory, Newcastle. The work of the former is included under the head of this report devoted to the purity of water, milk and foodstuffs, while during 1937 the College of Medicine Laboratory carried out the following bacteriological tests:—

(a) **Bacteriological Examination of milk.**

T.T. milk	24
Accredited milk	17
Pasteurised milk	21
Ordinary milk	9
	<hr/>
	71

(b) Faeces Culture	4
(c) Agglutination tests.....	1
(d) Cerebro-spinal fluids	1
(e) Virulence tests of swabs	4
(f) Milk for tuberculosis (inoculation tests)	4
(g) Examinations of water	11
(h) Wassermann tests.....	3
	<hr/>
	99

The Wassermann tests from the Joint Venereal Diseases Clinic were carried out at the College Laboratory.

M. MENTAL DEFICIENCY ADMINISTRATION.

The number of mental defectives ascertained to be subject to be dealt with at the end of the year was 276, made up of 147 males and 129 females.

These have been dealt with as follows:—

	Males	Females	Total
(1) In Institutions.			
(a) Under order	44	50	94
(b) Maintained by local authority ...	6	8	14
(c) Maintained by parents	2	1	3
	52	59	111
(2) On licence from institution	2	1	3
(3) Under guardianship	7	6	13
(4) In places of safety	—	—	—
(5) Under statutory supervision	74	51	125
(6) In Public Assistance Institution (Uncertified)	12	12	24
(7) Not yet dealt with	7	10	17
	154	139	293

The 111 cases in institutions are disposed as follows :—

	Males	Females	Total
Monkton Hall, Jarrow	4	—	4
Shotley Bridge Colony	31	22	53
Durran Hill House, Carlisle	—	5	5
Public Assistance Institution, Gateshead	4	14	18
Stoke Park Colony	3	5	8
Royal Albert Institution, Lancaster	6	6	12
Bow Villa, Morpeth	—	1	1
Field Heath House, Middlesex	—	1	1
Dovenby Hall, Cumberland	1	—	1
Prudhoe Hall Colony	—	1	1
Whittington Hall, Derby	—	—	—
Hortham Colony, Bristol.....	—	1	1
St. Joseph's Home, Sheffield	—	2	2
Private Institutions	2	1	3
Bedford Court, Worcester	1	—	1
	52	59	111

A further seven defectives belonging to Gateshead are maintained by the State, 3 males and 3 females being maintained in Rampton Institution and 1 in Mosside Institution, Liverpool.

The proposed replacement of the accommodation for the acute sick in the High Teams Public Assistance Institution will allow of reorganisation of the accommodation, whereby it will be possible to establish a separate department catering entirely for mental defectives. This proposal is to be examined by the Public Assistance Committee and by the Mental Deficiency Act Committee of the Local Authority. The alternatives which confront these two committees are the appropriation of the mental deficiency department of the "schools" blocks of the institution as a small colony for the mentally defective or the establishment under the Public Assistance Committee, of a small colony for the mentally defective.

Whichever alternative is chosen, it is understood that the Board of Control will only approve the proposed colony for mental defectives of all ages and types, if of one sex only.

If both sexes are to be admitted, then a selection must be carefully made by considering grade, age and habits of each case.

N. HEALTH EDUCATION AND PROPAGANDA.

A joint propaganda committee, composed of members of the the Health Committee and of the National Health Insurance Committee of the Borough, along with co-opted members, carries out local health education. The Town Council gives an annual donation of £20 to carry on the work.

Mr. A. Morris, Clerk to the Insurance Committee, acts as secretary.

In 1937, the National Health Education Campaign of the Health and Cleanliness Council, inaugurated by the Prime Minister, was opened locally by the holding of a health week commencing on Sunday, 3rd October. The Borough Council contributed towards the expense of the Health Week to the extent of a sum not exceeding £50.

The programme of Health Week was as follows:—

Sunday, 3rd October	...	...	Health Sunday.
Monday, 4th October (evening)	...	...	Address—"The National Health Campaign," in Gateshead Town Hall.
Tuesday, 5th October (afternoon)	...	...	The opening of the District Midwives' Home by Professor Ranken Lyle. Film lecture to nurses and midwives on "Puerperal Sepsis." This lecture was provided by the Pilgrim Trust.
(Evening)	...	...	Film for women and girls—"Those nerves of Ours," by Dr. Hickling.
Wednesday, 6th October (evening)	...	...	Lecture—"Teeth in Relation to Health," by D. Skinner, L.D.S., School Dental Officer.
Thursday, 7th October (evening)	...	...	Demonstrations of physical training by juvenile and adult voluntary organisations.
Friday, 8th October	...	...	"Chadwick" Lecture, by Miss Zoe Puxley, O.B.E.—"Building up a Fitter Britain." ...

During the school days of health week, film displays were given to batches of children accompanied by a 10 minutes' talk by a medical member of the Health Staff.

During the remainder of the year the propaganda of the Health and Cleanliness Council in the form of bookmarks, leaflets, etc., were distributed throughout the schools and libraries of the town, while sets of posters were displayed on the Empire Marketing Boards.

In accordance with the suggestion of the Minister of Health, a list of the official health services serving the Borough citizens has been supplied to each post office and sub-post office within the Gateshead area. This pamphlet is available in every post office therefore, for consultation by members of the public.

Other health talks have been given to various groups of voluntary organisations by members of the professional and sanitary staff of the Corporation.

III. Sanitary Circumstances of the Area.

A. WATER SUPPLY.

The town water supply is obtained from the Newcastle and Gateshead Water Company. It is constant, and is derived from upland sources at Catcleugh, Colt Crag, East and West Hallington, Whittle Dene and Little Swinburne, where the Company have large reservoirs, covering 874 acres, with catchment areas of 30,000 acres. Filtering and chlorination plants are situated at Whittle Dene and Throckley, and their combined capacity output is about 13,000,000 gallons per day, serving an area of 150 square miles and 750,000 people.

The supply to the Borough flows by gravitation to a pumping station where it is forced to reservoirs at Carr Hill and Sheriff Hill at heights of 450 and 520 feet above the datum line. From thence the water flows to all parts of the town, under sufficient pressure to reach all parts of the district.

The monthly statements of "Water in Store" supplied by the Water Company for 1937 show the following figures:—

January	...	...	...	5238	million	gallons
February	...	...	...	5316	„	„
March	...	...	...	5345	„	„
April	...	...	...	5270	„	„
May	...	...	...	5265	„	„
June	...	...	...	4800	„	„
July	...	...	...	4293	„	„
August	...	...	...	3801	„	„
September	...	...	...	3699	„	„
October	...	...	...	3511	„	„
November	...	...	...	3300	„	„
December	...	...	...	5002	„	„

showing a variation between March and November of 2,045 million gallons. The great influx of water in December was due to snowfall in the moorland districts.

The Company has completed the improvement of the Carr Hill Reservoir by concreting the floor and sides, with a view to reducing the growth of crenothrix and other algae, which was commented upon by the Public Analyst in his reports last year.

Samples of the water are taken every month, and the reports of the analytical and the bacteriological examinations are given in the attached tables.

CHEMICAL EXAMINATIONS BY THE PUBLIC ANALYST.

Results expressed in parts per 100,000.

	MONTHLY SAMPLES					
	1	2	3	4	5	6
1. Total solid matters in solution	20.8	20.00	25.80	29.40	21.80	19.200
2. Chlorine (as Chlorides)	1.420	0.994	1.562	1.491	1.491	1.420
3. Ammonia	0.003	0.004	0.003	0.002	0.003	0.003
4. Albuminoid Ammonia	0.010	0.008	0.005	0.006	0.007	0.008
5. Nitrogen (as Nitrates)	0.033	0.030	0.043	0.039	0.020	0.010
6. Oxygen absorbed (15 mins.).....	0.123	0.139	0.071	0.066	0.118	0.120
7. " " (4 hours)	0.235	0.272	0.154	0.131	0.193	0.211
8. Lead and other Poisonous metals	none	none	none	none	none	none
9. Hardness before boiling	13.3°	12.7°	16.6°	17.1°	15.0°	13.1°
10. Hardness after boiling one hour	5.7°	6.6°	6.6°	6.6°	7.6°	7.9°
11. Appearance in 2 foot tube	clear	clear	clear	clear	clear	clear
12. Smell when warmed	none	none	none	none	none	none
13. Microscopical examination of statement	S.	S.	S.	S.	S.	S.

	MONTHLY SAMPLES					
	7	8	9	10	11	12
1. Total solid matters in solution	18.60	14.60	13.20	14.80	14.00	17.00
2. Chlorine (as Chlorides)	1.207	1.065	1.278	1.065	1.207	1.065
3. Ammonia	0.003	0.006	0.002	0.002	0.006	0.006
4. Albuminoid Ammonia	0.009	0.004	0.003	0.006	0.008	0.007
5. Nitrogen (as Nitrates)	0.033	0.020	0.007	0.010	0.013	0.020
6. Oxygen absorbed (15 mins.).....	0.095	0.092	0.107	0.106	0.120	0.070
7. " " (4 hours)	0.193	0.198	0.194	0.183	0.192	0.157
8. Lead and other Poisonous metals	none	none	none	none	none	none
9. Hardness before boiling	12.4°	10.5°	8.3°	9.9°	9.8°	10.9°
10. Hardness after boiling one hour	6.6°	6.7°	6.1°	7.1°	6.5°	8.3°
11. Appearance in 2 foot tube	clear	clear	clear	clear	clear	clear
12. Smell when warmed.....	see	none	none	see	none	none
13. Microscopical examination of statement	note below	S.	S.	note below	S.	S.

Sample No. 7.—The report stated that “The sample is cloudy and has a distinct and unpleasant smell, and microscopic examination of the sediment shows that it is crowded with diatoms and algae growths. Cleansing of the reservoir would seem desirable.”

Sample No. 10.—The slightly cloudy appearance was probably due to some local disturbance (?repairs to mains or branch-pipes).

J. T. DUNN, D.Sc., F.I.C.
H. C. L. BLOXAM, F.I.C.

Results of the Bacteriological Tests.

Tests : (1) Coli-aerogenes test. (" Presumptive ")

(2) Total colonies developing on Agar at 37° C
(48 hours' incubation).

(3) Total colonies developing on Agar at 20°-22° C
(3 days' incubation).

(4) Streptococci test.

1937	Results of Tests				Conclusion from Tests
	1	2	3	4	Satis. : S. Unsatis. : NS.
	B. Coli per 100 ml.	Per ml.	Per ml.	Positive or Negative	
February	0	42	450	Negative	S.
March	3	45	175	"	S.
April	3	34	78	"	S.
May	0	28	220	"	S.
June	0	48	330	"	S.
July	5	22	130	? Positive	S.
August	5	5	45	Negative	S.
September	1	13	90	"	S.
October	1	36	150	"	S.
November.....	0	17	45	"	S.
December.....	1	38	280	"	S.

Sample No. 6 was " Query positive, one or two suspicious chains."

P. M. CONGDON,
Bacteriologist, Public Health
Laboratory, King's College,
Newcastle.

B. SEWERAGE, DRAINAGE AND CLOSET ACCOMMODATION.

All the dwelling houses of the Borough are now served by water closets, which drain into the public sewers. These sewers, of which there are 30, include 18 main sewers draining into the river at various points.

No new sewer was laid down during the year. Continuous extension of the sewerage system continues in the areas of new housing development.

C. RIVER POLLUTION.

The River Tyne is one of the most polluted rivers in the country, and the state of the river is not surprising, considering that the untreated sewage derived from a population of roughly 800,000 on both banks of the river is discharged into it.

It is very obvious that the problem of river pollution is not the concern of any particular local authority, but one which will require to be remedied by the authorities on either side of the river setting up two main sewers running along the river side and leading to an effective sewage disposal works. The construction of a proper sewerage system could not possibly be undertaken by the joint local authorities without considerable assistance from national sources.

Friars' Goose Sewer Outlet.

The nuisance complained of at the Friars' Goose Sewer outlet, which discharges close to a ship repairing yard with an attached dwelling house, still continues.

The tenant of the dwelling house complains of the odour and also of the plague of flies during the warm months of the year.

During the year the site was visited by an Inspector of the Ministry of Health and at his request, samples of sewage taken from the Friars' Goose Sewer were sent to the public Analyst. From the examination made, it is evident that the sewage flowing in the Friars' Goose Sewer is extremely septic prior to discharge into the river at this point. Specimens of flies complained of proved, on examination, to be mainly the house-fly, blue-bottle and horse-fly.

The problem, however, is not concerned entirely with the Friars' Goose Sewer in as much as the Tyne itself has been observed at this point to convey crude sewage, which is deposited on the slipway of the shipyard. This deposition of sewage material on the slipway is entirely due to the bend in the river at this point, where there is also a considerable tidal rise and fall.

D. PUBLIC CLEANSING.

The work of public cleansing was carried out during the year to the satisfaction of everyone, and no complaints were received regarding nuisances in connection with the collection of refuse.

In connection with tipping adjacent to Sheriff Hill Hospital, there was observed during the months of August and September, a somewhat serious prevalence of flies.

As a result of this experience, tipping close to the hospital was carried out intensively during the winter months, with the object of filling up the quarry between the hospital and the reservoir. It is hoped that in this way, there will be no necessity to tip close to the hospital during the summer of 1938, and accordingly the fly prevalence is unlikely to recur.

I am indebted to Mr. R. H. Storer, F.Inst.P.C., Cleansing Superintendent for a summary of the year's work.

“ Collection of House and Shop Refuse. Details of Receptacles.

No. of Ashbins and Dry Boxes	34,297
No. of Box Closets.....	72
No. of Dry Ashpits	40

It is again pleasing to report that the number of Dry-Boxes has been further reduced by 360 during the past year, from 730 to 370, and portable standard bins substituted. This policy will be pursued until the whole of these boxes are abolished, which can only be accomplished by the co-operation of the owners, as they cannot be enforced to convert these receptacles.

There has been considerable progress made during the year with the conversion of Privy-Closets, there having been 63 Privy-Closets and 6 Ashpits converted during this period.

Collection.

Ashbins and Dry-Boxes are emptied weekly. In certain tenemented properties in the older portion of the town a collection is carried out daily, while in one or two small areas, it is found necessary to give a twice weekly collection during winter months. As far as practicable, all owners are required to supply a separate bin for each tenant and in this way it is possible to hold the tenant responsible for the class of refuse deposited therein.

The total number of calls for ashbins and boxes at all classes of premises for refuse during the year was 1,840,086, as against 1,815,223 calls the previous year, and the weight of refuse has averaged out at 42½ lbs. per bin as against 42 lbs. per bin the preceding year.

In addition there has been 394 calls made, to empty ashpits, during the year as against 429 calls the previous year.

It is interesting to record that during the past year the last of our stud of horses has been disposed of and the whole of the collection is now carried out by modern mechanically propelled vehicles, each of which is fitted with steel sliding covers to ensure as little nuisance as possible from dust dissemination while loading.

Disposal.

The tonnage of refuse collected and disposed of during the year was as follows :—

House and Shop Refuse	35,306 tons
Street Sweepings and Gully Contents ...	4,395 „

The whole of this refuse was disposed of by controlled tipping on land owned by the Corporation, with the exception of 64 tons, which were delivered to private tips upon request and under special circumstances.

The major portion of this volume of refuse was disposed of at the Church Quarries, Sheriff Hill (viz., 26,073 tons), the balance being disposed of at Farnacres, the Teams and Moss Heap Quarries, Wrekenton.

The filling and levelling of the old claypit at the Teams has been completed and the land handed over to the Education Authority for use as playing fields. The Council has been successful in securing 19 acres of dene-land at Farnacres, Coach Road, in which there is an old disused sandpit, suitable for supplying covering material for all refuse after tipping, and this will serve as an outlet for all refuse from the Western portion of the Borough for a number of years.

Street Cleansing.

There are 115·46 miles of Roads, Streets and Lanes within the Borough as against 111·53 miles last year. During the past year 2 R.S.C. Mechanical Sweeper Collectors have been purchased and are now in regular operation, cleansing all main thoroughfares in the early morning, after which they sweep such other streets as have impervious surfaces. Older streets and lanes are cleansed by hand sweeping. Traffic arteries and principal shopping centres are swept four times daily, and all other areas once to three times weekly as required.

Principal thoroughfares are also swept on Sundays and holidays. There are 5,211 gullies within the Borough, 90% of which are cleansed mechanically and immediately sealed with fresh water, the remaining 10% being either small type gullies or inaccessible for machines. There has been a complete absence of complaints of smells from street gullies since the present method of cleansing was adopted. Street watering, sanding, and gritting of roads and footpaths was carried out as and when required throughout the year, according to prevailing climatic conditions."

E. SWIMMING BATHS.

The Corporation Baths at Mulgrave Terrace continue to serve the district.

During the summer the pond tends to become overcrowded, but the Baths' Superintendent, Mr. G. Scurfield, takes great pains to ensure a constant addition of chlorine, so that there is always a considerable amount of free chlorine in the water leaving the pond to be re-filtered.

The Corporation scheme for the provision of an up-to-date baths is likely to materialise next year as substantial progress has been made in the negotiations with the Commissioner for Special Areas regarding the availability of a grant.

F. REPORT OF CHIEF SANITARY INSPECTOR.

(1) Inspections and Notices.

Complaints Received.

From Householders :—

General Defects	608
Verminous Conditions.....	236
From Health Visitors and Other Departments.....	87
Total	931

These were all enquired into, and where necessary, referred to other departments for attention.

Sanitary Inspection.

Summary of Sanitary Inspectors' Visits :—

General Sanitation.

Nature of Visit or Inspection.	No. of Inspections
Water Supply	197
Drainage	983
Stables and Piggeries	92
Offensive Trades	63
Fried Fish Shops.....	74
Houses Let in Lodgings	12
Tents, Vans and Sheds	30
Factories	49
Workshops	151
Workplaces	82
Bakehouses	70
Theatres and Places of Entertainment	98
Ashbin renewals	174
Deposits of refuse	106
Rats and Mice	400
Smoke Observations	15
Schools	5
Shops	337
Limewashing Passages, etc.	162
Poultry Keeping	17
Miscellaneous Sanitary Visits	535

Housing.

Under the Public Health Acts.

Number of Houses inspected	1153
Visits paid to above houses	2346

Under the Housing Acts.

Number of Houses inspected	702
Visits paid to above houses	2837

Overcrowding. (See also overcrowding survey).

Number of houses inspected.....	19
Visits paid to above houses	20

Verminous Premises.

Number of houses inspected.....	122
Visits paid to above houses	252
Disinfection of furniture	419

Miscellaneous housing visits	957
------------------------------------	-----

Notices were served upon owners, agents, and tenants requiring the abatement of nuisances and repair of dwellings, drains, sanitary convenience, etc., as set out below :—

No. of Informal Notices served	1256
No. of Informal Notices complied with.....	1144
No. of Statutory Notices served	81
No. of Statutory Notices complied with	77
No. of reminders	327

(2) **Supervision of Repairs and Improvements.**

For purpose of repair and improvement of dwelling-houses, the following work done under notices or by voluntary action was supervised :—

Dwellings.

Defective roofs and spouting overhauled and repaired	625
Ventilation provided, subsoil removed, etc.	154
Defective floors overhauled and repaired	217
Exterior walls repaired and pointed	401
Chimney flues and stacks, ovens and ranges repaired and renewed	463
Stairs, doors, window frames and cords repaired and renewed	467
Interior walls, ceilings and plastering repaired	429
Sculleries provided or repaired.....	191
Scullery benches renewed	110
Food stores and pantries provided	227
Handrails provided	92

Drainage and Sanitary Conveniences.

Choked drains and waterclosets cleared	150
Drains relaid and repaired	206
4 inch pipes used (cast iron 117 feet)	3235 ft.
6 inch pipes used	296 ft.
Manholes and traps provided	106
Gullies and gratings renewed	266
Vent and soil pipes	1683 ft.
Additional waterclosets	58
Watercloset basins renewed	48
Watercloset cisterns and flush pipes renewed	47
Scullery sinks renewed	103
Waste-pipes renewed	1298 ft.
Waste-pipe traps provided (brass traps : 21)	244

Convenience and Outhouse Buildings.

Brick ash receptacles replaced by ash bins	360
Ashpits abolished	6
Watercloset doors, seats, walls and roofs replaced and repaired	406
Ashbins provided (renewals)	38
Coalhouses and outhouses rebuilt and repaired	271
Water provided to waterclosets	44

Yard Paving, etc.

Yard paving renewed or repaired	309
Yard walls rebuilt	199
Yard doors replaced	167
Poultry erections removed	4

Water Supply.

Water supply renewed and fittings repaired	79
--	----

By arrangement with the Newcastle and Gateshead Water Company 171 notifications were sent by them of premises where water supply had been turned off for defects or non-payment of rates. They also send notice when the water is re-instated.

(3) Reconditioning of Dwellings.

Continued attention was directed to various areas for the purpose of obtaining such alterations, improvements and repairs to dwellings as would extend their useful life, and bring them more in line with present day practice in the provision of amenities such as adequate sculleries, internal sinks, and water supply, wash boilers, food storage, etc.

Section 51 of the Housing Act, 1936, enables owners to apply for certificates that property will not come within the operation of the Clearance or Demolition Orders for periods of five to ten years, and applications have been approved, if they submit plans where alterations such as scullery buildings, etc., are needed—with schedules of complete repairs and restoration. On the completion of such works to the satisfaction of the Borough surveyor and this Department, certificates in respect of twenty-Sight houses were granted.

The following is a summary of the works carried out :—

Housing Improvements and Re-Conditioning.

Principal Items of Work done.

New sculleries constructed	127
Existing sculleries enlarged or improved	36
Sculleries provided without additional construction	43
Sinks and water supply provided inside	182
Pantries and food storage cupboards provided	219
Coal fired or gas heated set-pots provided	191
Wash-houses provided or reconditioned	4
Tenants using above wash-houses	7
Paved and drained yard area provided.....	36
Additional waterclosets provided	50
Baths	13
Lavatory Basins	9

The following shows the results in improved accommodation obtained by the above work :—

No. of premises improved and reconditioned	142
No. of tenants occupying above premises before improvements were effected	241
Tenements converted into flats (15)	21
Flats converted into self-contained houses (6)	12
No. of tenants occupying improved and reconditioned premises	227
No. of tenants acquiring additional rooms.....	19
Houses reconditioned by general repairs (including repointing external walls and chimneys, roofs and spouting overhauled, doors, windows and ranges repaired or renewed, floors, internal plastering and walls and ceilings repaired, handrails and stairs renewed)	251

House Refuse Bins.

The Cleansing Department supplied 291 ashbins, standard 38 of which were required by notices served upon owners of 24 dwelling-houses. In default, requisitions to supply ashbins were sent to the Cleansing Department and charged to the owners of properties. 119 ashbins were supplied to Corporation houses and 65 to schools and institutions.

With the object of facilitating the work of collection and reducing the amount of litter and rubbish in back streets, intimations were sent out by arrangement with the Cleansing Department requesting the co-operation of the owners. There was a good

response to the appeal and as a result 360 ash receptacles with doors opening into the back streets were voluntarily closed up or abolished, and galvanized ashbins were provided without charge, making a total of 629 since the inception of the scheme.

(4) Sanitary Inspection of Public Buildings.

The following premises are subject to annual licences by the Licensing Justices, and before the licences are renewed, a certificate is required that the sanitary conditions are in order.

Theatres and music halls	1
Picture Halls	12
Halls with dancing and music licences	36
Billiard saloons	6
	—
	55

Inspections were made, and the following defects dealt with :

Walls, ceilings, etc., cleansed and re-decorated.....	4
Additional w.c.s provided	2
Conveniences, Lighting provided	2
„ (walls and w.c. basins cleansed)	9
„ (basins, cisterns, etc. repaired)	20
Urinals cleansed and repaired	7
Other defects remedied	3

Generally speaking, the premises were kept in a satisfactory sanitary condition and certificates were issued accordingly.

(5) Common Lodging Houses.

There are no common lodging houses in the Borough.

(6) Houses Let in Lodgings.

There are 17 houses in which 87 rooms are let as furnished lodgings. The majority of these are in large houses in which men are accommodated. Attention has been given to sanitary accommodation and cleanliness.

(7) Offensive Trades and Knackers.

Tallow and Fat Melters.....	3
Gut Scrapers and Tripe Preparers	1
Fish Fryers—Registered	47
„ Licenced	34
	— 81
Marine Store Dealers	6
	—
	91

One new licence for fish frying and four transfers were granted. Two premises were converted to other uses.

The fish fryers' premises were found to be very satisfactorily conducted. The provision of modern gas heated ranges, with steam condensers, and the hygienic fittings of counters and apparatus, with floors and walls which can be readily cleansed, are now recognised by the trade as being essential. The old prejudice against these premises has largely disappeared.

Knacker's Yard.

1,738 horses, 315 cattle, 743 cows, 6 sheep, 1 goat and 5 pigs were disposed of at Dobson's Knackers' Yard, South Shore Road. No complaints were received or made as to the conduct of this business.

One application for a licence was refused.

(8) Bakehouses.

Factory Bakehouses :	Wholesale	4	
	Retail	8	12
Workshop Bakehouses			40
Domestic Bakehouses			26
			—
			78
			—

The sanitary conditions on inspection were generally satisfactory, and any defects or neglect of cleanliness were promptly attended to.

There are no underground bakehouses in the Borough.

(9) Shops Inspection.

Under the provisions of the Shops Act, 1934, 337 visits were made to inspect sanitary conveniences and other arrangements for the welfare of persons employed.

Fertilisers and Feeding Stuffs.

Visits of inspection were paid to premises where fertilisers and feeding stuffs were sold, in course of shops inspection.

(10) Merchandise Marks Act.

Attention was drawn where necessary to the provisions of the Act and Orders as to labelling of meat, fruit, etc., with an indication of origin.

(11) Rats and Mice (Destruction) Act.

Work under this heading was carried out throughout the year ; 76 complaints were received, and 107 houses were found to be infested. The inspectors made 351 visits, and dealt with 55 defective drains and 41 various housing defects, broken floors, decayed walls, paving, absence of airgrates and 21 manure and refuse heaps, which allowed harbourage or ingress to dwellings.

The remedy of these defects together with the use of various types of poison baits, rat lime, traps, etc., resulted in most of the premises being cleared. 211 rats were found dead.

The gradual clearance of old buildings in slum areas is resulting in the removal of many sources of infestation.

During National Rat Week in November, 200 placards, issued by the Ministry of Agriculture and Fisheries, were displayed throughout the town emphasising the necessity for special action, and offering the advice and help of the staff.

(12) Verminous Dwellings.

Particulars of action taken for the eradication of Bed Bugs

Altogether 104 houses, 38 Council and 66 private, were found to be infested by bugs. The 38 Council houses and sixty of the private houses were disinfested, while the remaining six houses were still under treatment at the end of the year.

The methods employed for freeing infested houses from bed bugs are as follows :—

- (i.) Stripping off and burning wall papers.
- (ii.) Loosening wood skirtings, architraves, wood fixtures.
- (iii.) Applying blow lamp and spraying vermicides.
- (iv.) Repair of plaster, renewal of woodwork, etc., by owners.

325 tenants removed to Council houses had their furniture, bedding, etc., disinfested by HCN. gas during the process of removal.

The work of disinfestation was carried out by the Local Authority in occupied houses and by private contractor in the removals to Council houses.

Measures taken by way of supervision or education of tenants to prevent infestation or re-infestation after cleansing include :—

Periodical revisits (Co-operation of rent collectors and health visitors).

Warnings against introduction of second hand furniture.

The Corporation hire-purchase scheme for new furniture is of great assistance to the tenants where furniture is in bad condition.

Other Verminous Conditions.

Advice was also sought by 232 tenants complaining of infestation by beetles and crickets. Spraying with insecticides was carried out and in bad cases, floors, hearths and skirting-boards were taken up and all cavities and woodwork sprayed.

(13) Smoke Abatement.

15 visits were made and 4 observations taken of chimneys and advice given as to the means of reducing the nuisance arising therefrom. Attention was directed to methods of stoking, class of fuel, etc.

The chief offenders in the emission of dense smoke and grit were industrial processes engaged in coke, nut and bolt and iron foundry work. In our visits to these factories we had the valuable assistance and advice of the local inspector of the Ministry of Health (Alkali Works Department).

(14) Infectious Diseases.

1,234 visits were made to cases of infectious disease notified to the Medical Officer of Health, and housing conditions, means of isolation, milk supply, etc., were enquired into.

(15) Factory and Workshops Act.

A statement in the form required by the Home Office is given herewith. The defects listed were remedied without recourse to written notice or prosecution.

FACTORY AND WORKSHOPS ACT, 1901.

1.—INSPECTIONS.

	Inspections.	Written Notices	Prosecutions.
Factories.....	49	—	—
Workshops	118	—	—
Workplaces	163	—	—
Total ...	330	—	—

2.—DEFECTS FOUND.

	Found.	Remedied.
Nuisances under Public Health Acts :—		
Want of Cleanliness...	8	8
Want of Ventilation	1	1
Other Nuisances	1	1
Sanitary Accommodation :—		
Insufficient	5	5
Unsuitable or Defective	1	1
Not Separate for Sexes	2	2
Total ...	18	18

R. W. WILKINSON,
Chief Sanitary Inspector.

IV. Housing of the Working Classes.

Part IV.—HOUSING.

Slow but substantial progress was made in the improvement of the local housing conditions by further clearance of insanitary areas and rehousing of tenants therefrom during 1937. No houses, however, are yet in prospect for the re-housing of tenants from overcrowded houses. It appears that the relief of overcrowding by rehousing, will not be properly tackled for some time and a substantial change in the financial assistance given to this local authority would greatly expedite matters.

The scale of rents (given below) for slum clearance properties operated in the past rather unfairly against the worker who had very often to pay his travelling expenses to his place of employment and other additional charges. Accordingly during the year, the housing committee agreed to subtract, in the case of employed men, 2/- from the assessable income for a man and wife living together, and 1/- for each child living with the parents. Where more than one member of the household is employed, 10/- is deducted from the total income in respect of the first additional worker, 7/6 in respect of a second and 5/- in respect of a third.

Scale of Rents adopted 1934 for Slum Clearance.

WEEKLY. (Including Rates).

GRADUATIONS OF INCOME.	26/-	28/-	30/-	32/-	34/-	36/-	38/-	40/-	43/-	46/-	50/-
3 ROOMS.											
2 Persons	6/-	6/6	7/6	8/6	9/6	10/6					
3 „	6/-	6/6	7/6	8/6	9/6	10/6					
4 & 5 „	6/-	6/-	6/6	7/6	8/6	9/6	10/-	10/6			
4 ROOMS.											
4 & 5 Persons	6/-	6/-	6/6	7/6	8/6	9/6	10/-	11/-	12/-	12/6	
6 & 7 „	6/-	6/-	6/-	6/6	7/6	8/6	9/6	10/-	11/-	12/6	
5 ROOMS.											
4 & 5 Persons	6/-	6/-	6/6	7/6	8/6	9/6	10/-	11/-	12/-	12/6	14/6
6 & 7 „	6/-	6/-	6/-	6/6	7/6	8/6	9/6	10/-	11/-	12/6	14/6
8 & over	6/-	6/-	6/-	6/6	7/-	7/6	8/6	9/6	10/6	12/6	14/6

The following table produces in summary form the housing activities of the Health Department in 1937 :—

1. <i>Inspection of Dwelling Houses during the Year :—</i>									
(1) (a)	Total number of dwellinghouses inspected for housing defects (under Public Health or Housing Acts)	...	...	...	...	...	...	...	1855
(b)	Number of inspections made for the purpose	...	...	...	...	...	...	...	5183
(2) (a)	Number of dwellinghouses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925	...	...	...	...	...	...	...	702
(b)	Number of inspections made for the purpose	...	...	...	...	...	...	...	2837
(3)	Number of dwellinghouses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	...	...	...	...	...	...	...	309
(4)	Number of dwellinghouses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	...	...	...	...	...	...	...	472
2. <i>Remedy of Defects during the Year without Service of Formal Notices :—</i>									
	Number of defective dwellinghouses rendered fit in consequence of informal action by the Local Authority or their officers	...	...	...	...	...	...	...	380
3. <i>Action under Statutory Powers during the Year :—</i>									
(A) Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936 :—									
(1)	Number of dwellinghouses in respect of which notices were served requiring repairs	...	...	...	...	...	...	...	3
(2)	Number of dwellinghouses which were rendered fit after service of formal notices :—								
(a)	By owners	...	...	...	...	...	...	...	12
(b)	By local authority in default of owners	...	...	...	...	...	...	...	—
(B) Proceedings under Public Health Acts :—									
(1)	Number of dwellinghouses in respect of which notices were served requiring defects to be remedied	...	...	...	...	...	...	...	27
(2)	Number of dwellinghouses in which defects were remedied after service of formal notices :—								
(a)	By owners	...	...	...	...	...	...	...	19
(b)	By local authority in default of owners	...	...	...	...	...	...	...	—
(C) Proceedings under Sections 11 and 13 of the Housing Act, 1936 :—									
(1)	Number of dwellinghouses in respect of which Demolition Orders were made	...	...	...	...	...	...	...	9
(2)	Number of dwellinghouses demolished in pursuance of Demolition Orders	...	...	...	...	...	...	...	30
(D) Proceedings under Section 12 of the Housing Act, 1936 :—									
(1)	Number of separate tenements or underground rooms in respect of which Closing Orders were made	...	...	...	...	...	...	...	2
(2)	Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or room having been rendered fit	...	...	...	...	...	...	...	—
4. <i>Housing Act, 1936—Part IV.—Overcrowding.</i>									
(a) (i.)	Number of dwellings overcrowded at the end of the year	...	...	...	...	...	...	...	3331
(ii.)	Number of families dwelling therein	...	...	...	...	...	...	...	3384
(iii.)	Number of persons dwelling therein	...	...	...	...	...	...	...	19370
(b)	Number of new cases of overcrowding reported during the year	...	...	...	...	...	...	...	130
(c) (i.)	Number of cases of overcrowding relieved during the year	...	...	...	...	...	...	...	966
(ii.)	Number of persons concerned in such cases	...	...	...	...	...	...	...	5398
(d)	Particulars of any cases in which dwellinghouses have again become overcrowded after the Local Authority have taken steps for the abatement of overcrowding	...	...	...	...	...	...	...	Nil

Dilapidated Unoccupied Houses.

Three houses, which have been void for some years, were the subject of proceedings under Section 58 of the Public Health Act, 1936, which gave powers to deal with dilapidated buildings and structures. These houses are situated in good residential districts and contain six to eight rooms each. They had fallen into such a state of disrepair as to prevent the sale or letting of contiguous

houses. The cases were taken before the local justices, who made an order on the owner for a schedule of repairs, external and internal, submitted by this Department to the Court to be carried out within ten weeks. At the end of the year work was in progress.

These proceedings must be among the first recorded in the country, as the matter was taken up immediately the new Public Health Act came into operation on the 1st October, 1937.

A. SLUM CLEARANCE.

The original Five-Year Plan of slum clearance, which was approved by the Council in November, 1933, and commenced in April, 1934, was still being followed at the end of the year.

The position then is given in the undermentioned table :—

	Areas dealt with and confirmed	Properties dealt with			Orders confirmed
		Houses	Separate dwellings.	Persons displaced or to be displaced	
1934.....	11	124	201	716	11 Clearance
1935.....	5	61	121	479	5 Clearance
1936.....	18	350	546	2078	{ 10 Clearance 8 Compulsory Purchase
1937	14	326	529	2033		{ 3 Clearance 11 Compulsory Purchase
Totals ...	48	861	1397	5306	29 Clearance 19 Compulsory Purchase
TO BE DEALT WITH IN 1938					
1938.....	13	298	597	2239	{ 8 Clearance 5 Compulsory Purchase
STILL TO BE DEALT WITH AFTER 1938					
	—	212	251	943	—
Grand Totals		1371	2245	8488	—

The number of houses actually dealt with will therefore, be 1,371, the addition to the original estimate of 989 houses being accounted for by necessary extensions of the original areas represented in 1933.

932 families have been re-housed in corporation houses as a result of the proceedings during the four years ending in 1937, during which year 352 families were added to the total.

One peculiar fact in dealing with slum clearance and re-housing has emerged. When the census of families and individuals to be re-housed from a clearance area is taken for production in the official inquiry, the numbers are always greater than the number of families and individuals who are subsequently re-housed after the clearance order has been confirmed. The reason for this difference is somewhat elusive. In the first place, council houses are not provided for single persons or married couples without children who are displaced, and these individuals find fresh accommodation for themselves, either in the town or elsewhere. But this does not entirely cover the discrepancy between the two figures. To a certain extent deaths may account for the change, but one also has the impression that the annual tendency for the Borough population to decrease is also manifested in this anomaly. The findings of the second overcrowding survey of 1937 as compared with that of 1936, also suggest similar factors at work.

Clearance Areas Confirmed in 1937.

The following areas were dealt with during 1937, by eleven Compulsory Purchase Orders and three Clearance Orders, confirmed by the Minister of Health.

Area No.	Designation.	Order	Houses	Separate Dwellings	Persons
14	Nelson Square	Compulsory Purchase	39	119	428
21	Quarryfield Road ...	Clearance	37	40	171
23	Walker Street	Compulsory Purchase ...	13	32	147
23A	Walker Street	Compulsory Purchase ...	76	134	514
23B	Shuttles	Compulsory Purchase ...	7	14	62
25	Blue Quarries	Compulsory Purchase ...	12	18	77
25A	Blue Quarries	Compulsory Purchase ...	4	4	11
25B	Blue Quarries	Compulsory Purchase ...	51	67	263
30	Springwell Road ...	Compulsory Purchase ...	4	4	11
32	Springwell Road ...	Clearance	7	9	28
33	Lowerys Square	Clearance	24	23	84
45	Old Fold	Compulsory Purchase ...	47	47	169
46	Grosvenor Street ...	Compulsory Purchase ...	4	17	60
	Barnclose and Land	Compulsory Purchase ...	1	1	8
Totals :	14 Areas	11 Compulsory Purchase 3 Clearance	326	529	2033

The tenants displaced from these areas are being re-housed at Deckham, Wrekenton, Old Fold and Temple Green, but a few have been re-housed in older corporation houses which have become empty, due to death or removal of the tenants.

The estate of 36 new houses provided at Temple Green is an activity of the Church Army. H.R.H. the Princess Royal performed the opening ceremony of the Church Army Estate on

August 13th, 1937, and the houses have been tenanted by families displaced from local clearance areas, the names of whom were supplied to the Church Army by the Housing Inspector.

The following areas were inspected in detail during 1937, prior to representation by the Medical Officer of Health, as clearance areas. The Council passed resolutions to deal with these by five Compulsory Purchase Orders and eight Clearance Orders, all of which were duly submitted to the Minister of Health for confirmation.

Area No.	Designation	Order	Houses	Separate Dwellings	Persons
15	Ellison Square.....	Clearance	23	53	193
18	Ann Street	Compulsory Purchase ...	11	20	103
18A	Ann Street	Clearance	18	36	143
19	Charles Street	Compulsory Purchase ...	65	108	425
20	Grahamsley Street	Compulsory Purchase ...	35	98	331
20A	Busy Burn	Clearance	4	4	14
29	Glasshouse Yard	Compulsory Purchase ...	16	23	84
29A	Carr Hill Farm	Clearance	7	7	39
29B	Warburton House	Clearance	3	3	13
43	Boundary Houses	Clearance	22	33	158
43B	High Street, Wrekenton	Clearance	10	15	50
43C	King Pit	Clearance	10	11	45
47	Park Lane	Compulsory Purchase ...	74	186	641
Totals	13 Areas	8 Clearance 5 Compulsory Purchase	298	597	2239

The position of the Five-Year Programme at the end of 1937 is that including the above areas to be dealt with in 1938, there remain in proposed clearance areas, 510 houses with 848 tenants still to be treated .

Demolition and Closing Orders.

Besides the treatment of areas in the town, proceedings under the Sections 11 and 12 of the Housing Act continue in respect of individual unfit houses. During 1937, demolition orders were made for 17 houses with 19 families and 78 persons. Closing orders were made on two houses with three families and 11 persons.

26 families, comprising 109 persons, were actually re-housed from houses demolished or closed in 1937 and 1936.

Last year it was stated that a supplementary programme of slum clearance would require to be drawn up. This programme has not yet been represented, but it was estimated in 1936 that there would be 1,336 separate occupied dwellings incorporated. These dwellings were then tenanted by 143 single persons, 241 families of two persons, 316 families of three, 253 families of four and over, 283 families of five or six and 100 families of seven persons or over. The number given in 1936 may require considerable revision later, particularly due to the abatement of overcrowding in the dwellings therein.

B. OVERCROWDING.

The results of the preliminary survey undertaken by the enumerators in terms of the Housing Act, 1935, were given in the Report of last year. During 1937 the detailed survey, which included the application of standards of area to the overcrowding situation, was carried out, and the surprising finding was that family overcrowding had apparently abated of its own accord to the extent of roughly one third. The Table given herewith should be compared with Tables A and B of last year's Report.

Particulars of OVERCROWDED FAMILIES at the end of 1937.

	Fit Houses Privately Owned	Houses Owned by Local Authority	Unfit Houses	Totals
Number of Families Overcrowded	2,735	96	553	3,384
Percentage of all Families	9.9%	4.0%	40.2%	10.8%
Number of Persons concerned	15,781	637	2,952	19,370
Percentage of all Persons	15.9%	6.6%	59.3%	17.0%
Number of New Cases	108	5	17	130
Number of Persons concerned ...	592	39	93	724
Number of Cases Relieved.....	881	15	71	967
Number of Persons concerned ...	4,948	107	343	5,398

FAMILY AND POPULATION STATISTICS.

	Families.	Persons.	Av. per family.
Number in Privately Owned Fit Houses	27,585	99,450	3.6
„ „ Houses Owned by Local Authority.....	2,358	9,701	4.1
„ „ Unfit Houses.....	1,377	4,982	3.6
Totals	31,320	114,133	3.6

* " Unfit Houses " includes only houses in the five-year programme, and does not include houses in the Supplementary programme.

In 1936, 4,758 families of the 31,181 families surveyed were overcrowded, i.e. 15.8%. In the 1937 survey 3,384 families of 31,320 families surveyed were found to be overcrowded, i.e. 10.8%.

The overcrowded families living in privately owned fit houses, were reduced from 3,422 to 2,735. Similarly overcrowded families in Corporation houses were reduced from 123 to 96, and overcrowded families in unfit houses were reduced from 638 to 553, the total reduction of families overcrowded amounting to 799.

This great abatement of overcrowding without any re-housing activity by the local authority is phenomenal. The explanation would seem to lie in the application of the Housing Act from 1st July onwards by landlords, who have themselves taken steps to terminate sub-letting of houses owned by them, and let to families of the working class. Another feature that has helped to mitigate the situation, has been the publicity given to the

provisions of the Act, which has influenced tenants to look about for more suitable accommodation. A considerable amount of change in the tenancy of houses owned by private landlords has also occurred, and there is information in this department of no less than 2,200 removals within the town in the latter half of 1937.

While this improvement is very gratifying, one cannot expect the process to continue at the same rate in future years. Nevertheless the crude estimate of the number of houses required for the abatement of overcrowding has been reduced from 2,130 to 1,960.

C. HOUSING NEEDS OF THE AREA.

Last year it was stated in the Report that a minimum provision of 3,688 houses was required to rehouse tenants from Slum Clearance areas and to abate overcrowding. In reviewing the housing needs anew, the following would appear to be a shrewd estimate of future requirements in view of the apparent decline of overcrowding. The estimate is somewhat complicated by the fact that there is some overlapping between the needs for slum clearance and overcrowding, due to the necessity for a supplementary programme of slum clearance to be drawn up. To fulfil the remainder of the Five-Year Programme, approximately 1,377 tenants will require to be displaced. As 437 of these tenancies are of childless married couples or single persons, not ordinarily rehoused in slum clearance estates, it would appear that 940 new corporation houses are required to rehouse the remainder.

In the supplementary programme of slum clearance yet to be submitted, it is estimated that 1,336 tenants will be displaced and that 384 of these tenancies are of single persons or childless married couples. Altogether, therefore, to meet the needs of the supplementary programme 952 houses will be required to rehouse families.

In the two programmes of slum clearance, it is estimated that altogether 1,892 houses will be required to rehouse families, while 821 tenants will be displaced but not rehoused in slum clearance estates.

According to the overcrowding survey, which included as fit, houses probably to be dealt with in the supplementary programme as unfit, the figures showed a surplus of 1,462 single

or two-apartment houses, and the need for accommodation for 1915 families to be displaced. In applying the supplementary slum clearance programme to these gross figures, it would appear that approximately 450 of the surplus 1,462 single or two-apartment houses will be dealt with as unfit, leaving a net surplus of 1,012 fit two-apartment houses still available for use by the community. Similarly the figure of 1,915 tenants to be rehoused requires a reduction by approximately 540, consequent upon the proposed application of a supplementary programme of slum clearance.

The 821 tenants not to be rehoused in slum clearance estates could quite well be considered as future tenants of a similar number of the 1,012 fit two-apartment houses. This would leave a real surplus of only 191 fit two-apartment houses and it is reckoned that these if remodelled could be made into 90 three or four-apartment houses. If this were done, the housing needs of the area at the end of the year can be estimated. as 1,892 houses for slum clearance families, 1,375 houses for overcrowded families less ninety remodelled houses, a net figure of 3,177 new houses.

Of the 3,177 houses required, 412 were actually under construction at the end of the year, while a further 942 new houses are planned to be erected in 1938 or later in areas within the borough. This still leaves a necessity to find sites for 1,823 new houses to be erected before the housing situation of the borough is brought within the requirements of Acts of Parliament.

D. HOUSING PROGRESS SINCE THE WAR.

Private houses completed and occupied 1919-1937	3311
Corporation and Housing Association houses completed and occupied 1919-1937	2680
Housing Association houses under construction, December, 1937	412

Housing Association houses planned 1938 :—

Highfield	398
Old Fold	116
Wrekenton	4
Barn Close	124
Lobley Hill	300 (approx.)
Total.....	942

V. Supervision of Food.

Part V.—INSPECTION AND SUPERVISION OF FOOD.

A. MILK AND DAIRIES.

1. Registration and Inspection.

Cowbyres.

At the end of 1937 there were 12 cowbyres in the Borough registered as dairies, with a total of 190 dairy cows. The herds are of varying sizes, four containing more than twenty cows, and five less than ten.

The owners of two of these herds are licensed for the production of "Accredited" milk.

The cowbyres are inspected regularly by the District Sanitary Inspectors, and attention is directed towards the cleanliness and sanitary condition of the animals, premises and utensils, while regular limewashing is insisted on. 112 visits of inspection were made.

One new dairy was constructed and one cowbyre reconstructed by the provision of concrete floors and new stall fittings, while general repairs were also carried out. The provisions of the Milk and Dairies Order, 1926, are adhered to within the Borough.

Milk Retailers.

Premises used for the sale of Milk in the Borough amount to 284, but 139 of these are registered for the sale of milk in bottles only. 116 persons are registered in respect of milk shops, and a further 17 dairymen, whose registered premises are outside the Borough, are registered in respect of the sale of milk from carts or cars within the Borough.

General attention is paid by the district sanitary inspectors to the enforcement of cleanliness of storage and utensils as provided in the Milk and Dairies Order.

2. Purity of Milk.

Samples of milk for informal examination were taken in 70 cases and tested by the Gerber process, with seven non-genuine. Formal samples were taken to the number of 62, and of these three were adulterated as shown by deficient fat or non-fatty solids.

Six samples of ordinary milk were submitted to the inoculation test for tuberculosis. All were negative.

Six samples of ordinary milk were subjected to bacteriological test for total organisms per c.c. and presence of B. Coli. These samples, with two exceptions, were satisfactory.

3. Milk (Special Designations) Order, 1936.

Twenty licences were issued to fifteen firms under the above order: two for production, three for bottling, and fifteen for retailing.

The following table summarises the position :—

Producers. —Licensed for “Accredited” milk production and retail	2
Dealers. —Licensed to retail “Tuberculin Tested,” milk	11
Licensed to retail Pasteurised milk	2
Licensed to retail “Accredited” milk	2
Licensed to pasteurise and retail pasteurised milk	1
Licensed to bottle and retail “Tuberculin Tested” milk.....	1
Licensed to bottle and retail “Accredited” milk	1

The producers' herds are inspected by the Veterinary Officer prior to licence being granted, while the pasteurising plant in the Borough is regularly supervised. All these firms possess a sterilising plant for bottles and utensils.

Results of Bacteriological Examination.

TEST : (1) Methylene Blue Test.
(2) Bacillus Coli Test
(3) Total Count per c.c.

Grade of Milk	Total Samples Taken	Satisfactory in Tests 1 & 2	Satisfactory in one test		Satisfactory in test 3	Not Satisfactory	Tubercle Bacilli	
			1	2			Negative	Positive
Accredited	17	11	2	—	—	2	2	—
Tuberculin Tested	21	4	3	1	—	13	—	—
Tuberculin Tested (certified)	3	—	—	—	—	3	—	—
Pasteurised.....	21	—	—	—	13	8	—	—
Total Graded Milks	62	15	5	1	13	26	2	—
Ordinary Milk	9	3	1	1	—	—	2	2
Total Samples	71	18	6	2	13	26	4	2
SCHOOL MILK SUPPLY. (Included in the above table).								
Accredited	5	3	1	1	—	—	—	—
Pasteurised.....	13	—	—	—	10	3	—	—
	18	3	1	1	10	3	—	—

In the case of unsatisfactory samples from sources outside the Borough, the Medical Officer of Health of the district or in the case of certified milk, the Ministry) was informed of the result. The sources of the "Accredited" Milk within the Borough were closely supervised, while the pasteurisation plant was inspected and representations made to the person in charge.

4. Report of Action Taken by the Veterinary Inspector (T. R. Jarvie, Esq., M.R.C.V.S.) and the Inspector of the Local Authority under the Diseases of Animals Acts and Orders.

The Borough continued to be very free from any serious contagious disease amongst animals.

Live Stock Auction Marts.

The following is a statement of the number of animals which passed through Messrs. Maughan's three auction marts, Tyne Road East, during the year under review.

Fat Stock for Slaughter.	<u>1936</u>	<u>1937</u>
Cattle	15050	14930
Sheep	42650	41910
Calves.....	250	220
Pigs	340	290
	<hr/>	<hr/>
	58290	57350
	<hr/>	<hr/>
Store Animals.		
Cattle	21900	20770
Sheep	—	—
Dairy Cows	1615	1637
Pigs	—	—
	<hr/>	<hr/>
	23515	22407
	<hr/>	<hr/>
Total of all animals	81805	79757
	<hr/>	<hr/>

Sales were held on two days per week :—

Tuesdays.—Freshly landed Irish Cattle and other store cattle.

Fridays.—Fat stock for slaughter. Dairy cows (newly calved).

The Veterinary Inspector attended 99 sales and examined the stock sent in, and one of the staff (Mr. Carter) also attended for the purpose of issuing licences for movement of cattle, sheep and swine, and for purpose of general supervision in accordance with the various Orders issued by the Ministry of Agriculture and Fisheries.

Control of Movement.

For all purposes of the control of movement of animals 756 declaration forms were made out and 1,307 licences issued for the movement of 26,716 animals out of the Borough.

606 licences dealing with 14,905 animals into the Borough were received and checked, as detailed under the following headings.

Sheep (Movement) Orders.

Under the Sheep (Movement in Scotland and Northumberland) Order, of 1933, the following licences were granted:—

390 licences for 12,570 sheep to slaughterhouses.

This Order was revoked in August, 1937.

Irish Animals Order.

238 licences were received from the Inspectors of the Ministry at the various Irish animals' landing places and these were checked against the arrival of 12,720 cattle. 49 sales were held at which 736 licences were issued for removal to farms, while copies were sent to the Local Authorities of the areas to which cattle were consigned, to enable movement and detention to be controlled.

Transit of Animals Order.

Cleansing and disinfection of road vehicles used for the conveyance of animals to and from markets received attention at the washing dock provided by the proprietors of the Market at Redheugh Bridge Road, and 2,002 vehicles were dealt with.

Swine Fever.

No outbreaks of Swine Fever were reported.

The district inspectors made 92 visits to piggeries, including those for the purpose of checking the registers of movement, and to see that the Orders relating to the Boiling of Food-stuffs and the Packing Materials Orders and Record Books, were complied with.

Swine (Movement) Orders.

Under the Swine (Regulation of Movement) Orders, 549 licences for the movement of 3,621 pigs were issued and received and checked in the course of slaughterhouses and piggery inspection, as follows :—

Into the Borough.

9 licences for 90 store pigs to piggeries.
359 licences for 2095 fat pigs to slaughterhouses.

Out of Borough.

9 licences for 39 store pigs.
93 licences for 1058 fat pigs to slaughterhouses.
79 licences for 339 fat pigs to markets.

Tuberculosis Order.

Monthly visits were made to cowbyres in the Borough for the purpose of this Order. The number of cows inspected was 2,306.

18 samples of Milk were tested for Tuberculosis, with positive results in 3 cases.

In these latter cases special examinations were made and 3 cows suspected to be diseased were slaughtered and found to be affected with Tuberculosis.

One cow inspected at the Cattle Mart was suspected to be tubercular, and notice was served upon the owner requiring its removal. The animal was sent back to the premises from which it came, and the Local Authority of the district was notified of the action taken.

THOS. R. JARVIE, Veterinary Inspector.

R. W. WILKINSON, Inspector under the
Diseases of Animals Acts.

B. INSPECTION OF MEAT AND OTHER FOODS.

Slaughterhouses.

There are 12 privately owned slaughterhouses in the Borough, 8 of which are registered and 4 licensed annually ; they are used by 33 butchers.

Carcases Inspected and Condemned.

	<i>Cattle, ex- cluding Cows</i>	<i>Cows</i>	<i>Calves</i>	<i>Sheep and Lambs</i>	<i>Pigs</i>
Number killed	1867	4	38	9649	2152
Number inspected	1867	4	38	9649	2152
All Diseases except Tuberculosis.					
Whole carcases condemned	—	—	—	3	4
Carcases of which some part or organ was condemned	20	—	—	4	48
Percentage of the number inspected affected with disease other than Tuber- culosis	1.07	—	—	0.07	2.41
Tuberculosis only.					
Whole carcases condemned	2	—	—	—	8
Carcases of which some part or organ was condemned	41	—	—	—	59
Percentage of the number in- spected affected with tuberculosis	2.30	—	—	—	3.11

The inspection of meat was efficiently carried out by qualified Meat Inspectors. No contravention of the Meat Regulations as to hours of slaughtering, etc., occurred.

Attention was given to ensure sanitary conditions, regular removal of garbage and periodical limewashing. Six notices were served for the latter purpose.

There are 133 butchers and pork butchers shops, 7 tripe shops and 35 fish dealers shops under inspection. A total of 2,528 visits were made for food inspection purposes as follows :—

Visits to slaughterhouses	...	...	...	1305
Visits to shops and stalls	...	...	...	220
Other meat inspection visits	...	...	...	407
Visits to :—				
Butchers and fish shops	...	...	...	216
Grocers, etc.	...	...	...	91
Cowsheds	...	...	...	112
Dairies and milkshops	...	...	...	158
Ice Cream premises	...	...	...	19
				2528

Slaughter of Animals Act, 1933.

The slaughter of cattle and pigs by a mechanically operated instrument was made compulsory by this Act, and such apparatus is in operation in all slaughterhouses.

The question of including sheep was again considered, but was not adopted.

98 slaughtermen are licensed by the Local Authority under Section 3 of the Act.

Unsound Food.

As a result of inspections of slaughterhouses, butchers' shops, and other premises, 17 carcasses and other meat, weighing 1 ton, 14 cwt., and 458 internal organs, were condemned as being affected with various diseased, parasitic or unsound conditions.

Meat (Weight).

	Cattle	Sheep	Pigs	Total
Generalized Tuberculosis	1374	—	864	2238 lbs.
Localized Tuberculosis	176	—	585	761 „
Other diseased conditions	116	194	509	819 „
Totals	1666	194	1958	3818 „

Internal Organs (number).

Tubercular conditions	72	—	264	336 „
Other diseased conditions	22	8	92	122 „
Totals	94	8	356	458 „

570 lbs. of tinned meats and 262 lbs. of other foodstuffs were also condemned and destroyed.

Importation of Food Stuffs.

At the Corporation Quay, Hillgate, the following food stuffs, fruit, etc., were landed by the Tyne & Tees Shipping Company from foreign ports. Any damaged consignments, such as tinned goods or meat, are referred to the Inspector of the Tyne Port Sanitary Authority.

486,944 bags, barrels and cases, etc., of food stuffs were unloaded as against 448,804 last year.

Cereals and Flour	33871 bags
Sugar	6015 bags and cases
Salt	9818 bags
Yeast	8218 baskets
Butter	33135 casks
Bacon	13067 boxes
Cheese	39126 boxes
Condensed and powder milk ...	98837 casks and cases

Beer and wine, etc.	...	...	...	216 casks
Mustard	...	...	...	285 casks
Chemical Salts	...	...	...	13000 casks
Confectionery	...	...	...	573 cases
Foods (tinned)	...	...	...	1035 cases
Eggs	...	...	...	35721 cases
Fruit and Nuts	...	...	...	137533 barrels and cases
Vegetables	...	...	...	57741 crates and bags
Other Food Stuffs	...	...	...	69 cases and casks

PREMISES IN WHICH FOOD IS PREPARED AND SOLD.

						<i>Factories</i>	<i>Workshops</i>	<i>Workplaces</i>	<i>Shops</i>
Bakehouses	...	...	...	...	...	12	40	26	—
Drysalters and Confectioners	...	...	...	...	...	3	4	—	—
Mineral Water and Beer Bottlers	...	...	...	...	...	9	—	—	—
Sausage and Pie Makers	...	...	...	...	...	4	—	—	—
Dairies	...	...	...	...	...	3	—	3	—
Brewers	...	...	...	...	...	2	1	—	—
Pickle and Jam Works	...	...	...	...	...	3	2	—	—
Restaurant Kitchens	...	...	...	...	...	—	—	7	—
Food Warehouses	...	...	...	...	...	2	4	—	—
Fried Fish Shops	...	...	...	...	...	—	—	—	81
Wet Fish Shops	...	...	...	...	...	—	—	—	33
Tripe Preparers	...	...	...	...	...	—	—	1	—
Tripe Shops	...	...	...	...	...	—	—	—	7
Butchers Shops	...	...	...	...	...	—	—	—	137
						38	51	37	258
						Total..... 384			

C. FOOD AND DRUGS ACT.

SAMPLES TAKEN FOR ANALYSIS DURING THE YEAR 1937.

	Total	Pure	Adulterated
OFFICIAL SAMPLES.			
Milk	62	59	3
INFORMAL SAMPLES.			
Milk	70	63	7
Butter	6	6	—
Margarine	9	9	—
Lard	3	3	—
Tea	3	3	—
Flour	3	3	—
Cocoa	5	5	—
Coffee	2	2	—
Cornflour	2	2	—
Sweets	5	5	—
Cream Regulations.	—	—	—
Condensed Milk Regulations.	5	5	—
Preservative Regulations.			
Jams	6	6	—
Sausage	3	3	—
Dripping.....	2	2	—
Meat and fish pastes.....	5	5	—
Formal	62	59	3
Informal	129	122	7
Total	191	181	10

Details are given below of the milks found to be adulterated on formal sample and the action taken in respect thereof.

Description.	Nature and extent of deficiency.	Action Taken
No. 71	Non-fatty Solids 0.8%	Cautioned
74	Non-fatty Solids 7.5%	Further sample
84	Non-fatty Solids 6.7%	81. Genuine
	Milk Fat 3.3%	Further sample
		92. Genuine

Preservatives in Food Regulations 1925-1927.

One sample of dripping contained 3.6% of water and other impurities. Vendor cautioned.

Three of the six samples of Jams contained Sulphur Dioxide preservative in small amounts, and within the permitted limit.

No preservative was reported in any sample of milk.

D. FOOD POISONING.

No case of food poisoning came to the notice of the Medical Officer of Health.

During the year a most peculiar outbreak of enteritis occurred in the last week of August, involving 7 persons, of whom 4 lived in one house,—father, mother and 2 children, 2 in a second house and 1 in a third house. The infection seemed to have spread by contact with a child of 2 years, who was the first affected, and who had apparently contracted the disease through eating pieces of food lying on the ground outside the house. This ground, prior to being used for building purposes, was used for pig-breeding.

Samples of faeces were taken, from which *B. Aertrycke* was recovered.

3 of the cases were treated in hospital. All the 7 patients recovered very rapidly from their attacks.

VI. Prevention and Treatment of Disease.

A. INFECTIOUS DISEASES.

The following is a summary of the cases of infectious disease notified or otherwise coming to the knowledge of the Medical Officer of Health during the year. Most of the knowledge of non-notifiable disease comes through the channel of the school medical service and its collaboration with school attendance officers :—

	Disease	Cases	Deaths Registered	Removed to Hospital	Deaths in Hospital
Notifiable	Scarlet Fever	359	—	269	1
	Diphtheria	567	26	557	24
	Enteric Fever	—	—	—	—
	Dysentery.....	3	—	2	—
	Puerperal Fever and Pyrexia	24	2	9	2
	Acute Poliomyelitis	1	1	1	1
	Cerebro-Spinal Fever	7	5	7	5
	Ophthalmia Neonatorum	6	—	—	—
Non-notifiable	*				
	Erysipelas	70	7	17	3
	Acute Primary and Influenzal Pneumonia	209	125	24	16
	Other Pneumonia	—			
	Measles	115	3	3	1
	Whooping Cough	5	6	—	—
	Chickenpox	341	—	—	—
	Mumps	35	—	—	—
	Infectious Catarrhal Jaundice ...	50	—	—	—
	Scabies	164	—	—	—
	Tuberculosis—				
	Pulmonary	181	121	—	—
	Non-pulmonary	51	14	—	—

* The statistics given below this line in each column for each disease, are not necessarily related to each other.

(1) Notifiable Diseases.

Scarlet Fever.

This disease was of mild prevalence throughout the year but was tending to increase in December. There was one death subsequently transferred to another area.

Diphtheria.

Notifications of 567 cases of diphtheria were received during the year, a record number for the Borough. The outbreak began in the Autumn of 1936 and endured throughout 1937. The local prevalence was part of a regional incidence in the Northern half of Durham County and towns and villages within 10 miles of Gateshead suffered as severely. During the first eight months of the year the average monthly prevalence was 30 to 40 cases, but in October, November and December, the cases notified amounted to 247 altogether.

Hospital accommodation was available for every case, and all but ten were sent to hospital.

Prophylactic treatment of suspected cases was a routine measure of general practitioners in the area, and great use was made of the facilities for diagnostic swabbing, which were organised to give very prompt results. No case awaited a swab result longer than 24 hours.

The fatal cases were almost exclusively cases neglected at home until there was extensive membrane with glandular enlargement, before the doctor was called. The parents were not always to blame however, as in many instances the spread of membrane was extraordinarily rapid and toxæmia early in development.

The age incidence of the disease and of the fatalities ensuing is given below :—

Age	Cases	Deaths
0— 4 years	108	4
5— 9 „	247	15
10—14 „	131	5
15—19 „	40	—
20—34 „	31	—
35—44 „	6	—
45 & over	4	—

In addition there were two inwards transfers of diphtheria deaths in another area.

Immunisation was not available in the Borough until October, when the appointment of an Assistant Medical Officer made it possible to hold a weekly immunisation clinic at Greenesfield House. The response to the facilities provided has been very poor indeed, even with virulent diphtheria prevalent.

“ Carriers ” were detected by contact-swabbing of domestic contacts to the number of 48. These were examined and when found to be clinically free from the disease, were supervised under daily treatment at the school clinic, at a separate session from other children. They were all excluded from school.

A clinical account of the outbreak is given in this report, under “ Sheriff Hill Hospital,” and an account of the findings of serial typing of diphtheria bacilli, responsible for cases in the month of December, is included. In brief, the varieties prevalent in Gateshead in that month were “ mitis ” (50%), “ gravis ” (45%), “ intermedius ” (2·5%) and “ atypical ” (2·5%).

Diphtheria was of low prevalence in Newcastle and by courtesy of Dr. Charles, the appropriate percentages in Newcastle during December are given as "gravis" 37.5%, "mitis" 22.5%, "intermedius" 30%, "atypical" 10%. A further comparison for the months of October, November and December in Newcastle showed that in 121 cases the "intermedius" variety was responsible for 33% of cases, while "gravis" and "mitis" varieties were each responsible for 30% of the cases.

It is most peculiar that in Gateshead where the disease was epidemic, "intermedius" varieties were non-existent, as the two cases in which they were found lived in Stockton and Durham County respectively.

Careful watch was kept of school and class incidence but in no case was this suggestive of a local source of infection.

Enteric Fever.

No cases of typhoid or paratyphoid came to the notice of the Medical Officer of Health during the year, blood samples from suspects all yielding negative agglutination responses.

Dysentery.

3 cases of dysentery were notified. In 1 case the diagnosis was not confirmed, after repeated samples of faeces. 2 other cases referred to infants afflicted with gastro-enteritis, in institutions serving the area. The diagnosis was made in hospital. Both cases recovered.

Puerperal Infection.

24 cases of puerperal fever and pyrexia were notified. Most of these were treated at home, but 9 cases were removed to the Princess Mary Maternity Hospital. 2 of these cases died. The cases treated at home all made good recoveries.

Acute Pyliomyelitis.

1 sporadic case of this disease was notified and admitted to hospital, where it died.

Cerebro-Spinal Fever.

There were 7 notifications of cerebro-spinal fever and all the patients were removed to hospital. In 1 case the diagnosis was not confirmed, 1 case recovered and 5 other cases of children under 1 year died, despite serum-therapy.

Ophthalmia Neonatorum.

6 cases of ophthalmia neonatorum were notified. All of these made perfect recoveries under treatment at home.

Erysipelas.

70 cases of erysipelas were notified and there were 7 deaths. 13 cases were treated in Sheriff Hill Hospital with 2 deaths and 4 were notified from the High Teams Public Assistance Institution. A number of the cases of erysipelas were treated in the High Teams Institution, where there were 3 deaths from the disease.

Acute Pneumonia.

Altogether 209 notifications of primary and influenzal pneumonia were received during the year. 16 cases were treated in Sheriff Hill Hospital with 4 deaths. 8 were notified from the Public Assistance Institution, where there were altogether 12 deaths. A large number of the cases of pneumonia are not notified in this Borough. The number of deaths registered as occurring from pneumonia during the year, was 125.

It is recommended that when the extension of the Infectious Diseases Hospital is completed, all forms of pneumonia, primary and secondary, should be made notifiable.

(II) Non-Notifiable Infectious Diseases.

Measles.

Measles was of mild prevalence during the last 7 months of the year. There were only 3 deaths from the disease, one of these occurring in a child who had been removed to hospital. Towards the end of the year, the incidence was beginning to rise, as if in anticipation of an epidemic in the Spring.

Whooping Cough.

Only 5 cases of whooping cough came to the notice of the health department, although there were 6 deaths registered from this cause.

Chicken Pox.

Chicken Pox was prevalent in the last 9 months of the year.

Mumps.

This disease was of sporadic incidence only during 1937.

Infectious Catarrhal Jaundice.

A small outbreak of this disease began in the Spring in association with Low Fell School. The disease mainly affected school children and altogether 50 cases came to the notice of the health department during the remainder of the year.

An account of the epidemic appears in the report of the School Medical Officer.

Influenza.

An outbreak of influenza, associated with cases of pneumonia occurred during the first two months of 1937. There were 51 deaths from the disease, in addition to the deaths listed under the heading of pneumonia.

Scabies.

164 cases of scabies came to the notice of the School Medical service during the year.

There is no doubt that this disease has increased in the area, due chiefly to the lack of baths in many of the houses. It is intended in the new health centre, to instal 2 shower baths for use in treating the disease.

Where ambulatory treatment of scabies fails or when several individuals from one family are infected, it has been customary to refer these for treatment to the Public Assistance Institution.

B. TUBERCULOSIS (Report by S. D. Rowlands, M.D., D.P.H., B.Hy., Clinical Tuberculosis Officer).

1. Statistics.

Primary Notifications received during the year.

181 new cases of Pulmonary Tuberculosis were notified to the Medical Officer of Health during the year, and 51 new cases of other Tubercular Diseases. Two cases of pulmonary disease and three cases of non-pulmonary disease died unnotified. In addition five notifications of Pulmonary Tuberculosis were cancelled as non-tubercular, and three cases of non-pulmonary tuberculosis were cancelled as non-tubercular, leaving a nett total of 178 cases of Pulmonary Tuberculosis and 51 cases of other Tubercular Diseases.

This gives nett incidence rates for the year of 1.51 Pulmonary and 0.43 other Tubercular Diseases per 1,000 of population.

The total nett incidence rate of 1.94 per 1,000 of population for all forms of the disease is 0.41 per 1,000 less than last year.

The total of 232 new cases notified during 1937 compares with 296 notified during 1936, which is a decrease of 64,—(44 pulmonary and 20 non-pulmonary). This is very satisfactory and confirms the hope expressed last year, that the increase in cases noted during 1936 would prove to be only a temporary set-back, and that the steady decrease in cases of tuberculosis taking place during recent years would continue. In the case of Pulmonary Tuberculosis, there were fewer new cases notified during 1937 than in any previous year.

The incidence rates of Tuberculosis in the Borough since 1920, are shown in the following table:—

Year.	Pulmonary Tuberculosis	Other Tuberculous Diseases	Pulmonary Tuberculosis	Other Tuberculous Diseases	Incidence Rates (all cases).
1920	424	148	3.3	1.15	4.45
1921	398	191	3.18	1.5	4.68
1922	409	184	3.21	1.44	4.65
1923	284	120	2.21	0.93	3.14
1924	272	159	2.11	1.23	3.34
1925	276	185	2.14	1.43	3.57
1926	304	159	2.38	1.24	3.62
1927	251	157	1.97	1.23	3.21
1928	339	172	2.75	1.39	4.14
1929	352	159	2.87	1.37	4.25
1930	286	122	2.33	0.99	3.32
1931	264	135	2.13	1.09	3.22
1932	279	124	2.27	1.01	3.28
1933	288	97	2.31	0.77	3.1
1934	269	68	2.18	0.55	2.73
1935	195	49	1.6	0.4	2.0
(nett)					
1936	201	79	1.68	0.66	2.35
(nett)					
1937	178	51	1.51	0.43	1.94
(nett)					

Unnotified deaths have been added to the number of notified cases, as these cases should have been notified and their addition gives a more correct figure. Similarly, cancelled notifications of patients previously notified in error have been deleted for the year under review.

There were on the Notification Register at the end of the year 999 cases suffering from Tuberculosis (all forms) accounted for as follows :—

Pulmonary cases 361 Males.	Non-pulmonary 100 Males.
388 Females.	150 Females

Of the total 232 new cases notified, 198 attended the Dispensary seeking treatment, leaving a difference of 34 cases who were either too ill to benefit by treatment or did not wish to attend for treatment. All newly notified cases, whether they attend the Dispensary or not, are visited by a Health Visitor and a report made to the Tuberculosis Officer on their home conditions.

Of the total notifications received during the year, 32 were notified by the Tuberculosis Officer and 108 by private practitioners after consultation, giving a percentage of 60.3 cases seen by the Tuberculosis Officer prior to notifications.

2. Deaths from Tuberculosis during 1937.

During the year there were registered 118 deaths from Pulmonary Tuberculosis giving a mortality rate of 1.003 per 1,000 and 14 deaths from Other Tubercular Diseases, giving a mortality rate of 0.119 per 1,000.

The total Tuberculosis Death Rate was 1.122 per 1,000 of population which is the lowest on record, but is only a fraction lower than last year.

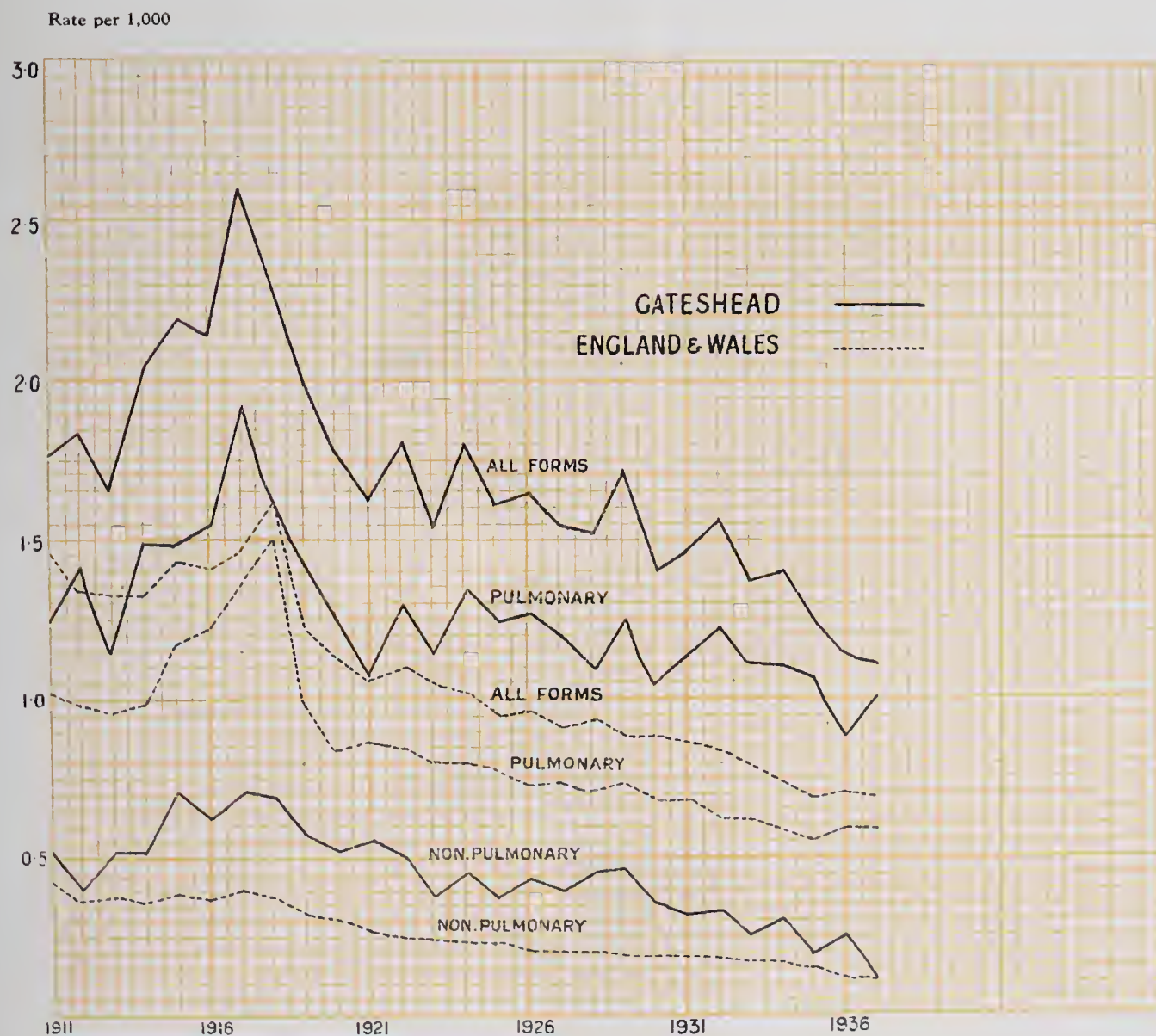
There has been an increase of 14 deaths from Pulmonary Tuberculosis during 1937, as compared with the previous year, and the new low record set up during 1936 has not been maintained. This is offset, however, by a marked reduction (16 cases) in the non-pulmonary deaths which have dropped by over 50% compared with the previous year. Thus there were actually fewer deaths from tuberculosis during 1937, but due to the decline in population, the death rate is a little higher than in 1936.

The total deaths being 132, constitutes the lowest number ever recorded from tuberculosis in Gateshead.

County Borough of Gateshead

TUBERCULOSIS

DEATH RATES per 1,000 of population
1911-1937



The appended table gives the mortality rates and actual number of deaths from Tuberculosis during the years 1920 to 1937.

Year	Total Deaths.			Death Rates per 1.000 population.		
	Pulmonary Tuberculosis	Other Tuberculous Diseases.	Total	Pulmonary Tuberculosis	Other Tuberculous Diseases.	All Forms
1920	161	69	230	1.25	0.53	1.78
1921	138	70	208	1.08	0.55	1.63
1922	168	65	233	1.31	0.51	1.83
1923	148	48	196	1.15	0.37	1.53
1924	176	58	234	1.36	0.45	1.81
1925	161	48	209	1.24	0.36	1.62
1926	160	50	210	1.25	0.39	1.64
1927	153	45	198	1.20	0.35	1.55
1928	135	55	190	1.09	0.44	1.53
1929	154	57	211	1.25	0.46	1.72
1930	129	44	173	1.05	0.35	1.41
1931	143	39	182	1.15	0.31	1.47
1932	152	40	192	1.24	0.32	1.56
1933	140	31	171	1.12	0.24	1.37
1934	135	37	172	1.097	0.3	1.398
1935	129	22	151	1.064	0.18	1.245
1936	104	30	134	0.873	0.252	1.125
1937	118	14	132	1.003	0.119	1.122

Further details of the new cases and deaths are given in the appended table:—

Age Periods.	NEW CASES.				DEATHS.			
	Pulmonary		Non-Pulmonary		Pulmonary		Non-Pulmonary	
	Males	Females	Males	Females	Males	Females	Males	Females
0—1	—	1	1	—	—	—	—	1
1—5	2	3	3	4	1	—	1	—
5—10	10	7	9	10	—	—	—	2
10—15	9	6	8	8	2	2	—	2
15—20	7	17	2	4	5	7	1	1
20—25	10	13	1	1	9	9	—	1
25—35	22	19	1	3	16	8	2	1
35—45	18	8	—	3	10	3	—	—
45—55	16	6	2	1	20	7	1	1
55—65	15	2	—	—	8	5	—	—
65 and up	1	—	—	—	3	3	—	—
Totals ...	110	82	27	34	74	44	5	9

These figures include all primary notifications, and also others coming to the knowledge of the Medical Officer of Health during the year from the following sources :—

					<i>Pulmonary</i>	<i>Non-Pulmonary</i>
(a)	Local Registrar	...	...	...	2	2
(b)	Registrar General	...	...	...	—	1
(c)	Posthumous	...	...	...	—	—
(d)	Transfers from other Areas (other than transferable deaths)	...	...	...	9	7

Of the Tuberculosis deaths 5 or 3.7% were not notified before death. Of these 2 were due to Pulmonary disease, 2 to Tuberculous Meningitis and 1 from Renal Tuberculosis.

The reasons for non-notification are given as follows :—

Thought to be previously notified by another doctor	.....	4
Notification overlooked	.....	1

The following table gives details of the interval elapsing between notification and death :—

Died under 1 week from notification	...	...	...	...	7
Died from 1-4 weeks from notification	...	...	...	...	17
Died between 1-3 months from notification...	...	...	...	...	15
Died between 3-6 months from notification...	...	...	...	...	14
Died between 6-12 months from notification	...	...	...	...	23
Died between 1-2 years from notification	...	...	...	...	17
Died between 2-3 years from notification	...	...	...	...	10
Died between 3-4 years from notification	...	...	...	...	9
Died over 4 years from notification	...	...	...	...	23

76 or 57.57% of the total deaths occurred within one year of notification as compared with 57.46% in 1936.

There still continues to be a large number of cases seen by the Tuberculosis Officer in an advanced stage of the disease. The reason for this is, in the great majority of cases, the fault of the patient himself, in not seeking advice on the reason for his ill-health sooner. Continuous propaganda pointing out the symptoms and signs of the disease, and the facilities offered for diagnosis and treatment will help to reduce this unfortunate position of affairs.

There does not appear to be any unreasonable delay on the part of the private practitioner in referring cases to the Tuberculosis Dispensary ; indeed, apart from definite cases sent, there were 224 other cases, ultimately found to be non-tuberculous, referred to the Tuberculosis Officer for opinion by private practitioners in the town, which illustrates the co-operation which exists between the Dispensary and the doctors.

TUBERCULOSIS. Wards, Incidence and Mortality Rates, 1937.

Wards.	Population.	PULMONARY TUBERCULOSIS				OTHER TUBERCULOUS DISEASES.				Death Rate (All forms).
		Number of Cases Notified (gross).	Incidence rate per 1,000 of Population.	Deaths.	Death Rate.	Number of Notifications.	Incidence Rate.	Deaths.	Death Rate.	
North	8660	20	2.3	10	1.15	2	0.23	2	0.23	1.38
North East	8250	19	2.33	10	1.21	1	0.12	...	...	1.21
North West	13860	24	1.73	19	1.37	6	0.43	2	0.14	1.51
Central	10913	17	1.56	10	0.91	9	0.82	1	0.09	1.00
East Central	11340	26	2.29	20	1.76	9	0.79	4	0.34	2.11
South Central	10955	12	1.09	4	0.36	3	0.27	1	0.09	0.45
West Central	10816	14	1.29	3	0.27	3	0.27	...	...	0.27
East.....	15523	21	1.35	18	1.16	8	0.51	...	...	1.16
South	13220	14	1.05	12	0.90	4	0.30	1	0.08	0.98
West	14063	12	0.85	12	0.85	5	0.35	3	0.21	1.06
Public Institutions	...	2	...	...	...	1	...	...	...	...
Total	117600	181	1.54	118	1.003	51	0.43	14	0.119	1.122

3. Tuberculosis Dispensary.

During the year 413 new cases and 157 contacts were examined at the Dispensary for the first time, 9 cases were inwardly transferred from other areas, and these together with 1,126 old cases, made 4,173 attendances.

Of the 157 contacts examined, 30 were found to be definitely tuberculous, 6 were still undiagnosed at the end of the year and the remainder were non-tuberculous.

Of the new cases (excluding contacts) 167 were found to be definitely tuberculous, 7 were still undiagnosed at the end of the year, and the remainder were referred back to their own doctors as non-tuberculous.

During the year 96 cases (60 Pulmonary and 36 Non-Pulmonary) were taken off the Dispensary Register as cured.

Sputum Examinations.

674 specimens of sputum were examined at the Dispensary and Whinney House Hospital, 163 of which contained Tubercle Bacilli (24.77%).

As an aid to diagnosis specimens of sputum are examined at the Dispensary, free of charge for private practitioners. 180 specimens were examined in this way during the year.

Evening Sessions at the Dispensary.

Evening Sessions were held regularly at the Dispensary throughout the year for the convenience of patients who are at work during the day.

Co-operation with Private Practitioner.

Close co-operation between the private practitioner and the Dispensary has continued during the year, out of 413 new cases (excluding contact and inward transfers) seen during the year 328 were referred to the Dispensary by private practitioners before diagnosis for an opinion. Of these 108 were subsequently notified.

On December 31st there were 309 insured persons on the Dispensary Register and 25 of these were receiving Domiciliary

Treatment from their panel doctors ; many of the remainder not requiring active treatment for the time being were able to continue at work.

Work for the Ministry of Pensions under special arrangements in force entailed the furnishing of 4 certificates and reports with respect to 'Tuberculous pensioners.

Public Health (Prevention of Tuberculosis Regulations) 1925.

No action has been necessary during the year under the above Regulations with regard to tuberculous persons employed in the milk trade.

Public Health Act, Section 62.

No action as regards the compulsory removal of patients to a Tuberculosis Institution was taken during the year.

Home Visiting.

The Health Visitors paid 247 first visits and 1,947 revisits, a total of 2,194 visits to patients' homes during the year, and the Tuberculosis Officer made 105 visits in special cases.

These visits of the Health Visitor play an important part in keeping in touch with the patients and careful consideration is given to the weekly reports presented to the Tuberculosis Officer.

7 Sanitary defects in 7 premises were reported to the Sanitary Inspector's Department, and appropriate action was taken in each case. The main defects noted were structural and concerned mostly with dampness of dwelling houses.

Housing and Sleeping Accommodation of Notified Cases.

164 new cases were investigated in which full particulars of housing and sleeping accommodation are available, and only 77 of these were found to occupy a separate bedroom.

8 occupied a separate bed with others in the room.

79 cases occupied the same bed as other persons, and of these 68 had one other person in bed with them, 9 had two others and 2 had more than two others.

Overcrowding and opportunity for mass infection continues as shown by the following figures:—

63 had two in the bedroom, 14 had three, 8 had four and 2 had 5.

Of the 164 cases investigated, the housing accommodation was as follows:—

One roomed tenement	....	....	10
2 rooms	....	....	36
3 rooms	....	....	39
4 rooms	....	....	53
Over 4 rooms	....	....	26

It will be seen that 84·14% of the cases occurred in houses having four rooms or under.

During the year an endeavour was made to alleviate the overcrowded condition of some of the most urgent cases. 22 families were rehoused during the year in Council houses.

Compared with the condition of patients in the report on housing conditions for the year 1936, there has been a considerable improvement in the figures relating to the sleeping accommodation of patients. One hopes eventually to reach the ideal when every tuberculous patient will have a room to himself.

Artificial Light Treatment.

Provision is incorporated in the new Greenesfield Health Centre under construction for a Sun-Ray treatment room, which will be used for the treatment of tuberculous cases.

4. Sanatorium Treatment.

The number of beds available for the residential treatment of Gateshead patients is as follows:—

Barrasford Sanatorium	.....	...	...	Males	10
Wolsingham Sanatorium	...	...	...	Females	12
				Children	3
*Stannington Sanatorium	...	...	...	Children	20
Stanhope Sanatorium	...	...	...	Children—	
				(Male)	11
Whinney House Hospital	...	...	...	Males	27
				Females	17—January 1st to February 5th.
				Females	21—February 5th to December 31st.

* High Teams Hospital—50 beds are available at this institution for advanced cases, of which a variable number are occupied by Gateshead patients. These are not under the control of the Tuberculosis Officer.

* Surgical cases occupy a proportion of the beds.

Poole Sanatorium.

The draft of the plans of the Poole Joint Sanatorium have been approved by the Ministry of Health during the year.

This institution will provide forty beds for the treatment of tuberculous cases from Gateshead.

TREATMENT OF TUBERCULOSIS.

Return showing the work of the Dispensary.

DIAGNOSIS	PULMONARY				NON-PULMONARY				TOTAL				GRAND TOTAL	
	Adults		Children		Adults		Children		Adults		Children			
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.		
A.—NEW CASES examined during the year (excluding con- tacts) :—														
(a) Definitely tuberculous ...	62	47	13	7	5	7	10	16	67	54	23	23	} 413	
(b) Diagnosis not completed...	—	—	—	—	—	—	—	—	2	1	2	2		
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	76	97	36	30		
B.—CONTACTS examined during the year :—														
(a) Definitely tuberculous ...	8	7	5	6	—	—	3	1	8	7	8	7	} 157	
(b) Diagnosis not completed...	—	—	—	—	—	—	—	—	—	—	4	2		
(c) Non-tuberculous ...	—	—	—	—	—	—	—	—	13	40	30	38		
C.—CASES written off the Dis- pensary Register as :—														
(a) Recovered... ..	18	16	19	7	4	3	21	8	22	19	40	15	96	
(b) Non tuberculous (includ- ing any such cases previously diagnosed and entered on the Dispensary Register as tuber- culous)	—	—	—	—	—	—	—	—	93	145	70	70	378	
D.—NUMBER OF CASES on Dispen- sary Register on Dec. 31st :														
(a) Definitely tuberculous ...	225	208	98	102	18	28	58	46	243	236	156	148	783	
(b) Diagnosis not completed...	—	—	—	—	—	—	—	—	2	1	6	4	13	
1. Number of cases on Dispensary Register on January 1st ...		816			2. Number of cases transferred from other areas and cases returned after discharge under Head 3 in previous years ...							24		
3. Number of cases transferred to other areas, cases not desiring further assistance under the tuberculosis scheme, and cases lost "sight of"		36			4. Cases written off during the year as Dead (all causes)							104		
5. Number of attendances at the Dispensary (including Contacts)		4173			6. Number of Insured Persons under Domiciliary Treatment on the 31st December							25		
7. Number of consultations with medical practitioners :— (a) Personal † (b) Other		6 323			8. Number of visits by Tuberculosis Officers to homes (including personal consultations) † ...							105		
9. Number of visits by Nurses or Health Visitors to homes for Dispensary purposes		2194			10. Number of :— (a) Specimens of sputum, etc., examined (b) X-ray examinations made in connection with Dispensary work							674 791		
11. Number of "Recovered" cases restored to Dispensary Register and included in A(a) and A(b) above		6			12. Number of "T.B." plus cases on Dispensary Register on Decem- ber 31st							292		

Return showing the extent of Residential Treatment and observation during the year in Institutions (other than Poor Law Institutions) approved for the Treatment of Tuberculosis.

		In Institutions on Jan. 1st (1)	Admitted during the year (2)	Discharged during the year (3)	Died in the Institutions. (4)	In Institutions on Dec. 31st (5)
(a) Number of doubtful-ly tuberculous cases admitted for observation.	Adult Males	—	6	6	—	—
	Adult Females	—	1	1	—	—
	Children	—	3	3	—	—
	Total	—	10	10	—	—
(b) Number of patients suffering from pulmonary tuberculosis	Adult Males	34	114	97	17	34
	Adult Females	27	69	68	4	24
	Children	24	34	32	1	25
	Total	85	217	197	22	83
(c) Number of patients suffering from non-pulmonary tuberculosis	Adult Males	2	—	1	1	—
	Adult Females	2	2	4	—	—
	Children	10	14	15	—	9
	Total	14	16	20	1	9
GRAND TOTAL (a), (b) and (c)		99	243	227	23	92

Return showing the extent of Residential Treatment provided during the year in Poor Law Institutions for persons chargeable to the Council.

		In Institutions on Jan. 1st (1)	Admitted during the year (2)	Discharged during the year (3)	Died in the Institutions (4)	In Institutions on Dec. 31st (5)
Number of patients suffering from pulmonary tuberculosis	Adult Males	18	37	22	15	18
	Adult Females	9	19	17	8	3
	Children	1	3	2	1	1
	Total	28	59	41	24	22
Number of patients suffering from non-pulmonary tuberculosis.	Adult Males	2	2	—	2	2
	Adult Females	2	4	4	1	1
	Children	4	5	4	3	2
	Total	8	11	8	6	5
GRAND TOTAL		36	70	49	30	27

PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in Summary form (a) the condition at the end of 1937 of all patients remaining on the Dispensary Register: and (h) the reasons for the removal of all cases written off the Register. The Table is arranged according to the years in which the patients were first entered on the Dispensary Register as definite cases of pulmonary tuberculosis, and their classification at that time.

[illegible]

NON-PULMONARY TUBERCULOSIS.

Supplementary Annual Return showing in summary form (a) the condition at the end of 1937 of all patients remaining on the Dispensary Register; and (b) the reasons for the removal of all cases written off the Register.

[illegible]

Return showing the immediate results of treatment of definitely tuberculous patients discharged during the year from Institutions (other than Poor Law Institutions) approved for the treatment of Tuberculosis.

		DURATION OF RESIDENTIAL TREATMENT.												Grand Totals.				
Classification.		Condition on Discharge.	Under 3 months, but exceeding 28 days.			3—6 months.			6—12 months.			More than 12 months			Totals.			
			M.	F.	CH.	M.	F.	CH.	M.	F.	CH.	M.	F.		CH.	M.	F.	CH.
PULMONARY TUBERCULOSIS	Class T.B. Minus	Quiescent ...	3	—	4	2	3	11	—	5	8	—	—	6	5	8	29	42
		Not Quiescent ...	4	3	—	4	3	—	1	2	1	—	—	—	9	8	1	18
		Died in Institution ...	—	1	—	—	—	—	—	—	—	—	—	—	—	1	—	1
	Class T.B Plus Group I.	Quiescent ...	1	—	—	—	1	—	—	—	—	—	—	—	1	1	—	2
		Not Quiescent ...	—	—	—	1	3	—	—	1	—	—	—	—	1	4	—	5
		Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Class T.B.Plus Group II	Quiescent ...	—	1	—	—	1	—	1	3	—	1	—	—	2	5	—	7
		Not Quiescent ...	20	10	—	15	15	1	10	6	—	2	2	1	47	33	2	82
		Died in Institution ...	4	—	—	2	1	—	2	—	1	—	—	—	8	1	1	10
	Class T.B Plus Group III	Quiescent ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Not Quiescent ...	10	—	—	3	2	—	1	1	—	3	1	—	17	4	—	21
		Died in Institution ...	3	—	—	1	1	—	—	—	—	—	—	—	4	1	—	5
TOTALS (Pulmonary)			45	15	4	28	30	12	15	18	10	6	3	7	94	66	33	193
NON-PULMONARY TUBERCULOSIS	Bones & Joints	Quiescent ...	—	—	—	—	—	—	—	—	1	—	—	—	—	—	1	1
		Not Quiescent ...	—	—	1	—	—	1	—	—	—	—	—	1	—	—	3	3
		Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Abdom-inal	Quiescent ...	1	—	—	—	—	2	—	—	4	—	—	3	1	—	9	10
		Not Quiescent ...	—	1	—	—	—	1	—	—	1	—	—	—	—	1	2	3
		Died in Institution ...	—	—	—	1	—	—	—	—	—	—	—	—	1	—	—	1
	Other Organs	Quiescent ...	—	—	—	—	—	—	—	1	—	—	—	—	—	1	—	1
		Not Quiescent ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	Peri-pheral Glands	Quiescent ...	—	1	—	—	1	—	—	—	—	—	—	—	—	2	—	2
		Not Quiescent ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
		Died in Institution ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS (Non-pulmonary)			1	2	1	1	1	4	—	1	6	—	—	4	2	4	15	21

5. Tuberculosis Care Committee.

The Care Committee continues to render useful services in the care of necessitous patients.

This assistance has usually taken the form of the granting of clothing (as a rule to enable patients to be properly equipped to go to Sanatorium), the loan of bed and bed clothes (to enable infectious cases to sleep by themselves), surgical appliances, and extra nourishment.

Comparative Statistics of Work done is given below :—

		1937	1936	1935	1931
Cases considered during the year.					
Old Cases	74				
New Cases	88				
		162	185	187	41
Clothing outfits provided :—					
At cost of Committee	95				
Obtained through other sources ...	21	116	128	103	10
Cases to whom beds and bedding loaned		17	26	48	18
Total cases to whom beds and bedding are now on loan		45	44	29	18
Bedclothes loaned		4	8	11	—
Surgical appliances provided		2	4	11	2
Necessitous patients helped with nourishment :—					
At cost of Committee	0				
Obtained through other sources ...	32	32	26	19	—
Other forms of help (e.g., dentures invalid's chair etc.,) obtained for patients through other sources.		10	15	12	—
Tuberculosis families "adopted" by St. Martins' Jubilee Friends Scheme		51	51	32	—

S. D. ROWLANDS, M.D., D.P.H., B.Hy.,

Clinical Tuberculosis Officer.

C. VENEREAL DISEASES.

During the year an important change took place in the facilities for the treatment of venereal diseases in the Tyneside area, as foreshadowed in last year's report. The new joint committee clinic was opened on 30th August, 1937, under the control of Dr. A. E. W. McLachlan.

This clinic is built in the grounds of the Newcastle General Hospital and is linked up, as far as possible, with the administration of that hospital. The Venereal Diseases clinic held in the Royal Victoria Infirmary, was abandoned at the same time and the records transferred to the new clinic along with a considerable proportion of the staff.

In-patient accommodation for venereal cases is provided for in a special ward block of the Newcastle General Hospital.

The official returns of the work done under the auspices of the joint committee for the treatment of venereal disease in Gateshead are fully contained in the following tables:—

Return relating to Gateshead Cases treated at the Joint Treatment Centre, Royal Victoria Infirmary, Newcastle, from 1st January, 1937—30th August, 1937.

	Syphilis		Soft Chancre		Gonorrhoea		Condition other than Venereal		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Persons under treatment or observation on 1st January, 1937.	31	23	—	—	40	10	9	3	80	36	116
Old Cases. returned.	5	8	—	—	7	1	—	—	12	9	21
New Cases. Syphilis, primary	2	—	—	—	—	—	—	—	2	—	2
„ secondary	3	—	—	—	—	—	—	—	3	—	3
„ late	8	9	—	—	—	—	—	—	8	9	17
„ congenital	4	2	—	—	—	—	—	—	4	2	6
Soft Chancre	—	—	—	—	—	—	—	—	—	—	—
Gonorrhoea	—	—	—	—	57	12	—	—	57	12	69
Non venereal	—	—	—	—	—	—	26	25	26	25	51
Cases transferred from other centres	—	1	—	—	3	2	—	—	3	3	6
Totals	53	43	—	—	107	25	35	28	195	96	291
Cases discharged after cure.	5	5	—	—	42	7	27	21	74	33	107
Cases ceasing attendance before completing treatment.											
Syphilis, primary	3	—	—	—	—	—	—	—	3	—	3
„ secondary	1	—	—	—	—	—	—	—	1	—	1
„ late	3	12	—	—	—	—	—	—	3	12	15
„ congenital	3	4	—	—	—	—	—	—	3	4	7
Soft Chancre	—	—	—	—	—	—	—	—	—	—	—
Gonorrhoea	—	—	—	—	19	1	—	—	19	1	20
Cases ceasing attendance after completing treatment but before tests of cure.	1	—	—	—	3	3	—	—	4	3	7
Cases transferred to other centres.	3	—	—	—	2	1	—	—	5	1	6
Cases under treatment on 28-8-37	34	22	—	—	41	13	8	7	83	42	125
Totals	53	43	—	—	107	25	35	28	195	96	291
No. of attendances for medical treatment	805	570	—	—	746	200	41	33	1592	803	2395
„ intermediate „	—	—	—	—	1164	—	—	—	1164	—	3559
In-patients											
Admissions.	1	1	—	—	1	—	—	—	2	1	3
In-patient days	5	9	—	—	5	—	—	—	10	9	19

Pathological Work of the Centre.

7 specimens of secretion were examined for spirochaetes and 242 for gonococci. 218 specimens of blood were submitted to Wasserman reaction and 3 to gonococcus complement fixation test.

Drugs Used.

The arsenical compounds used in the centre were novarsenobillon and stabilarsan of which 565 injections were given, 673 injections of mercurials were also given and 185 of bismuth in the form of Bisoxyl.

S. THOMPSON,

Medical Officer.

Return relating to Gateshead cases treated at the Joint Committee Clinic, Newcastle General Hospital. from 30th August—End of 1937.

	Syphilis		Soft Chancre		Gonorrhoea		Conditionsother than Venereal		Totals		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
Persons under treatment or observation on 30th August, 1937	34	22	—	—	41	13	8	7	83	42	125
Old Cases, returned	24	27	—	—	1	—	—	—	25	27	52
New Cases. Syphilis, primary	2	2	—	—	—	—	—	—	2	2	4
„ secondary	—	—	—	—	—	—	—	—	—	—	—
„ late	10	2	—	—	—	—	—	—	10	2	12
„ congenital	1	—	—	—	—	—	—	—	1	—	1
Gonorrhoea	—	—	—	—	29	10	—	—	29	10	39
Non-Venereal	—	—	—	—	—	—	37	14	37	14	51
Cases transferred from other areas	5	1	—	—	4	—	—	—	9	1	10
Totals	76	54	—	—	75	23	45	21	196	98	294
Cases discharged after cure	—	1	—	—	19	8	30	14	49	23	72
Cases ceasing attendance before completing treatment.											
Syphilis, primary	1	—	—	—	—	—	—	—	1	—	1
„ secondary	—	—	—	—	—	—	—	—	—	—	—
„ late	2	2	—	—	—	—	—	—	2	2	4
„ congenital	1	—	—	—	—	—	—	—	1	—	1
Soft Chancre	—	—	—	—	—	—	—	—	—	—	—
Gonorrhoea	—	—	—	—	7	1	—	—	7	1	8
Cases ceasing attendance after completing treatment but before tests of cure.	—	—	—	—	—	—	—	—	—	—	—
Cases transferred to other centres	—	1	—	—	4	1	—	—	4	2	6
Cases under treatment on 31/12/37	72	50	—	—	45	13	15	7	132	70	202
Totals	76	54	—	—	75	23	45	21	196	98	294
No. of attendances for medical treatment	559	379	—	—	648	128	111	75	1318	582	1900
„ „ intermediate „	—	—	—	—	1382	233	161	6	1543	239	1782
In-patients.											
Admissions	8	—	—	—	2	—	—	—	10	—	10
In-patient days	93	—	—	—	39	—	—	—	132	—	132

Pathological Work of the Centre.

10 specimens of secretion were examined for spirochaetes and 453 for gonococci. 235 specimens of blood were submitted to Wassermann reaction and 86 to gonococcus complement fixation test.

Drugs Used.

The arsenical compounds used in the clinic were novarse-nobillon, sulphostab, stabilarsan, neokharsivan, silversalvarsan, neosalvarsan, of which 441 injections were given, tryparsamide and mapharside, of which 45 injections were given. 858 injections of bismuth were also given in the form of bicreol, chlorostab, bisoxyl, stabismol and quinostab.

A. E. W. McLACHLAN,
Clinical Medical Officer.

D. VACCINATION.

Mr. T. Middlemast, Vaccination Officer, returns the following summary of proceedings in respect of the year 1937 :—

Number of entries in birth lists received during year 1937	...	1785
Vaccination Certificates received.		
<i>a.</i> from private practitioners	... ..	107
<i>b.</i> from public vaccinators	... ..	767
<i>c.</i> revaccinations	... ..	18
Certificates of Postponement received.		
<i>a.</i> Health of child	... ..	81
<i>b.</i> Conditions of house	... ..	—
<i>c.</i> Prevalence of disease	... ..	—
Died unvaccinated	... ..	87
Statutory declarations of conscientious objectors	... ..	915
Certificates of insusceptibility	... ..	4
Cases where patients have removed from area	... ..	24
Cases otherwise not found	... ..	8
Number of entries in lists sent to Public Vaccinators	... ..	859
Proceedings	... ..	Nil

E. CANCER.

The local facilities for the diagnosis and treatment of Cancer, apart from domiciliary attendances by the family practitioner, depend entirely upon the facilities available in the voluntary hospitals and at Newcastle Royal Victoria Infirmary, with its attached Radium Institute.

The local authority maintains hospital beds in the High Teams Poor Law Institution in which incurable cases of Cancer are sometimes treated and from which a number of cases, have in the past been sent to the Royal Victoria Infirmary, for diagnosis and treatment.

The Public Assistance Committee is a contributor to the funds of the Royal Victoria Infirmary to the extent of £126 per annum.

The Royal Victoria Infirmary, Newcastle, being one of the best equipped teaching hospitals in the country, provides ample facilities for the diagnosis of Cancer through its facilities for X-ray examination and its full complement of consultant staff, including surgeons, physicians and whole time teaching specialists.

In close association with the Infirmary, there is the Radium Institute with two Radium Officers and various technicians, who co-operate with the consultant staff of the Infirmary in the treatment of malignant disease.

Deep X-ray therapy is also available at the Royal Victoria Infirmary.

**Table showing Age and Distribution of Cancer Deaths,
(1911-1937)**

Year.	Age				Total.
	0-25 yrs.	*25-45 yrs.	45-65 yrs.	65 & Upwards	
1911	2	14	44	29	89
1912	1	17	50	37	105
1913	3	12	59	37	111
1914	3	12	58	37	110
1915	1	14	64	29	108
1916	2	17	59	44	122
1917	3	23	62	36	124
1918	1	14	49	35	99
1919	3	9	65	43	120
1920	1	7	75	34	117
1921	1	10	67	45	123
*1922	—	12	69	41	122
*1923	2	19	66	49	136
*1924	3	14	76	41	134
*1925	—	13	70	52	135
*1926	—	12	72	58	142
*1927	2	18	72	61	153
*1928	1	8	79	81	169
*1929	—	15	71	70	156
*1930	—	13	65	69	147
1931	2	8	74	62	146
1932	—	23	89	86	198
1933	2	13	86	75	176
1934	—	13	91	72	176
1935	—	10	70	78	158
1936	2	17	89	91	199
1937	1	18	88	90	197

*For the years 1922 to 1930 inclusive the figures quoted refer to the age group 20-45 years of age and not to the age group 25-45 years of age.

The sites of malignant disease in the fatal cases of 1937 may be studied in an analysis.

Cancer Deaths, 1937—Situation of Disease.

SITE.		AGE GROUPS—In years.						Males	Fe- males	Total
		Under 25	26-35	36-45	46-55	56-65	66-75	over 75		
CANCER.										
Buccal Cavity	Tongue	—	—	—	—	1	1	—	2	2
	Jaw	—	—	—	—	1	—	—	1	1
	Mouth	—	—	—	—	2	1	1	4	4
	Pharynx	—	—	—	—	—	1	—	1	1
	Throat	—	—	—	—	—	1	—	1	1
Digestive Tract	Oesophagus	—	—	—	1	2	5	2	9	10
	Stomach	—	1	3	9	13	12	9	32	47
	Intestine	—	—	—	—	1	4	3	5	8
	Colon	—	2	—	2	5	2	3	8	14
	Caecum	—	—	—	1	1	—	1	2	3
	Rectum	—	1	2	1	3	7	2	7	16
	Gall Bladder	—	—	—	—	—	—	1	—	1
	Liver	—	1	—	3	6	10	3	7	23
	Pancreas	—	—	—	1	—	—	—	1	1
Respirat- ory System	Epiglottis	—	—	—	1	—	—	—	1	1
	Larynx	—	—	—	1	1	2	—	3	4
	Lung	—	—	—	1	4	—	—	3	5
	Mediastinum	—	—	—	—	1	—	—	—	1
Genito- Urinary System	Uterus	—	1	—	2	6	2	—	—	11
	Cervix Uteri	—	—	1	2	2	1	—	6	6
	Ovary	—	1	—	—	3	1	1	6	6
	Pelvis	—	—	—	—	—	—	—	—	—
	Bladder	—	—	—	—	1	2	—	1	3
	Penis	—	—	—	—	—	—	—	—	—
	Prostate	—	—	—	—	—	1	2	3	3
	Testes	—	—	1	—	—	1	—	2	2
Other Organs.										
Abdomen Breasts Brain	Abdomen	—	—	—	—	1	—	1	2	2
	Breasts	—	—	2	2	2	3	2	—	11
	Brain	1	—	1	—	1	—	—	3	3
Other Tumours.										
Rodent Ulcer of Face Rodent Ulcer of Ear Sarcoma of Pelvic Bones " " Femur " " Clavicle Myelomata Unspecified	Rodent Ulcer of Face	—	—	1	—	1	—	—	2	2
	Rodent Ulcer of Ear	—	—	—	—	—	—	—	—	—
	Sarcoma of Pelvic Bones	—	—	—	1	—	—	1	1	2
	" " Femur	—	—	—	—	—	—	—	—	—
	" " Clavicle	—	—	—	—	—	—	—	—	—
Myelomata Unspecified	Myelomata	—	—	—	—	—	—	—	—	—
	Unspecified	—	—	—	—	2	1	—	2	3
		1	7	11	28	60	58	32	101	197

Of the total deaths, 60 occurred in hospital, 38 in the Public Assistance Institution, 16 in the Royal Victoria Infirmary, 2 in Newcastle General Hospital and 4 in other institutions.

F. WELFARE OF THE BLIND.

No scheme for the prevention of blindness has been initiated in this area, and the favourable time to initiate a comprehensive scheme will arise when the hospital and clinic facilities of the Borough have been brought up to date.

Children under school age and school children with defective vision are able to get treatment and have glasses supplied through the child welfare and school services.

Other cases of threatened blindness are dealt with at the voluntary hospitals of the area.

Statistics relevant to blindness in Borough residents are given hereunder as at 31st March, 1938 :—

Blind Persons classified by age and sex :—

Years.	Total	Males	Females
0-5.....	—	—	—
5-16	5	1	4
16-21	8	4	4
21-40	29	17	12
40-50	15	9	6
50-65	67	32	35
65-70	26	14	12
Over 70	83	37	46
	233	114	119

Age at which blindness occurred :—

Age (Years)	Total	Males	Females
0-1.....	37	17	20
1-5.....	4	1	3
5-10	5	2	3
10-20	13	8	5
20-30	15	11	4
30-40	14	4	10
40-50	34	22	12
50-60	36	17	19
60-70	45	21	24
70 and over	30	11	19
Unknown	—	—	—
	233	114	119

Condition of Blind Persons :—

	Total	Males	Females
Employed (i) in workshops	9	7	2
(ii) as home workers	11	5	6
(iii) otherwise	6	6	—
Total	26	18	8
Under training (Industrial)	9	6	3
Trained but unemployed	1	1	—
Unemployable	190	87	103
No training but trainable	2	1	1
	228	113	115
Children of school age	5	1	4
	233	114	119

2 males and 2 females are resident in the Public Assistance Institution.

2 females are resident in the Mental Hospital.

Occupations of Employed :—

Basket & Cane Workers	3	Mattress or Mat makers	4
Copyists	1	Piano Tuners.....	2
Dealers, Tea Agents &c.	7	Miscellaneous	2
Knitters	7		—

Blind, Physical and Mental Defectives :—

	Total	Males	Females
(a) Blind and Mental Defective	2	—	2
(b) Blind and Physically Defective	11	9	2
(c) Blind and Deaf	7	4	3
Combinations of (a) and (b)	1	—	1
	21	13	8

The scheme to assist the unemployable or necessitous blind by augmenting their income, which has been in operation since 1927, has been carried out during the year. The grants made for the year under review were as follows :—

In the case of single unemployable or necessitous blind person, the income is made up to 20/- per week.

In the case of two unemployable or necessitous blind persons in a household the joint income is made up to 30/- per week.

On 5th August, 1931, the scheme was enlarged to incorporate the provision of domiciliary relief to dependents of blind persons.

For the purpose of this scheme “ dependents ” are deemed to be “ the wife of the registered blind person and such of his children under sixteen years of age as may be resident with him and dependent upon him for support.”

A sub-Committee composed of members of the Blind Persons Act and the Public Assistance Committees, and also representatives of the Home Teaching Society for the Blind meets monthly and considers each case on its merits.

An average of 116 grants were made each week and the total amount disbursed during the year ended 31st March, 1938, was £2,777 6s. 11d. while £639 11s. 6d. was paid in respect of dependents of Blind Persons.

The above sum is irrespective of grants made to Home Workers, Workshops for the Blind, and the Newcastle and Gateshead Home Teaching Society.

Home Workers.

The amount disbursed to Home Workers in augmentation of income was £274 10s. 0d.

In August, 1936, the Council decided to increase the augmentation from 8/- or less according to a scale to a flat rate of 10/- per case, provided the total income from all sources, including grant, did not exceed £2 10s. 0d. per week.

In cases where Home Workers' earnings did not reach £1 per week, there was granted in addition to the 10/- a sum equal to the difference between his earnings and £1.

£82 0s. 0d. was paid in this respect.

Certification of Blindness.

73 persons were examined by the Ophthalmologist, 46 of whom were certified as being Blind within the meaning of the Blind Persons Act.

VII. Miscellaneous

A. PHARMACY AND POISONS ACT, 1933.

The administration of the provisions of this Act relating to listed sellers of poisons is carried out by the Health Department and a register of such persons is kept at the Health Office. In 1937, 27 persons were registered for the sale of poisons listed in Part II of the Poisons List.

Arrangements were made with the Pharmaceutical Society for the Society's Inspector to supervise and report on the sale of poisons by registered vendors at a fee of 12/6d. per annum per shop, but this fee was reduced to 10/6 in June.

B. AIR RAID PRECAUTIONS.

During the year 1937, attention was given by the health department to the preliminary organisation of the local first aid precautions in respect of wounded and gas-contaminated persons.

It would appear that 8 first aid posts, providing separate units for each sex and each divided into two sections for the unit to deal with the two classes of cases (contaminated and uncontaminated) would require to be set up and staffed.

For serious casualties two corporation hospitals have been earmarked for immediate transformation into casualty clearing hospitals.

Relationship has been established with the St. John Ambulance Society and the British Red Cross Society with a view to the recruitment and training of the necessary personnel to man the first aid service.

C. LOCAL GOVERNMENT AND OTHER OFFICERS' SUPERANNUATION ACT, 1922.

42 individuals appointed to designated posts were examined by members of the public health staff during the year.

D. UNIFICATION OF LOCAL GOVERNMENT ON TYNE-SIDE.

The Report of the Royal Commission dealing with the matter was issued during 1937. There were two reports.

The " Majority " Report suggested the establishment of a Regional Council for the area comprised in the County of Northumberland along with the County Boroughs and County Districts on the South bank of the River Tyne.

The " Minority " Report suggested the establishment of a large area with County Borough status, incorporating Newcastle, Gateshead and the other districts adjoining the river on both sides.

No action has so far been taken to implement either the " Majority " or " Minority " Reports of the Royal Commission.

E. BURNING PIT HEAP AT HEWORTH.

The nuisance from this burning pit heap, which is situated in the Urban District of Felling, continued intermittently during the year.

The matter is having the attention of the Felling Urban District Council and H.M. Inspector of Alkali Works.

The nuisance is particularly felt when the air is relatively still and humid, and takes the form of sulphurous fumes.

**VIII. Municipal Institutions
for the Sick.**

PART VIII. MUNICIPAL INSTITUTIONS FOR THE SICK.
SHERIFF HILL INFECTIOUS DISEASES HOSPITAL.
ANNUAL REPORT FOR 1937.

GENERAL STATISTICS.

Table of Admissions, Discharges and Deaths.

Disease on Admission	In Hos- pital 1/1/37	Ad- missions 1937	Dis- charges 1937	Deaths 1937	In Hos- pital 31/12/37
Scarlet Fever.....	21	269	254	1	35
Diphtheria	29	557	481	27	78
Erysipelas	0	13	11	2	0
Meningitis	0	7	1	6	0
Measles	0	3	2	1	0
Acute Poliomyelitis	0	1	0	1	0
Dysentery	2	2	4	0	0
Pneumonia	0	16	12	4	0
Infant Born	1	0	1	0	0
Mastoiditis.....	0	1	1	0	0
Observation Cases	0	1	1	0	0
Totals ...	53	870	768	42	113

(a) Patient Days in 1937.

Scarlet Fever	7,716
Diphtheria	15,676
Other Conditions	691
Total	24,083

(b) Average Duration of Stay of Patients.

Scarlet Fever cases	30 days
Diphtheria cases	29 „
All cases	28 „

(c) Beds Occupied during Year

Average number	66
Highest number	126
(on December 12th)	
Lowest number	40
(on April 10th)	

Comparative Table of Admissions and Patient-Days.
(1923-1937)

Yr.	Admiss- ions	Days	Year	Admiss- ions	Days	Year	Admiss- ions	Days
1923	177	—	1928*	468	12,660	1933	580	25,795
1924	324	—	1929*	121	4,692	1934	796	39,182
1925	286	—	1930	313	13,180	1935	376	18,700
1926*	493	12,642	1931	415	17,100	1936	399	14,944
1927*	267	5,818	1932	512	23,128	1937	870	24,083

*During these years the institution was used mainly for the isolation of Smallpox.

The year 1937 established a record for the number of admissions to the hospital and also a record for the number of cases of diphtheria treated during a year. The number of cases of diphtheria admitted imposed a severe strain on the accommodation and nursing staff of the hospital, which was particularly felt at the end of the year. Certain steps were taken to increase the available accommodation by refitting the corrugated iron ward for the reception of patients and by arranging to house part of the nursing and domestic staff in two municipal houses at Nos. 34/36, Causeway, Sheriff Hill.

The staff, which is that normally necessary for a hospital of roughly 80 beds, had to be augmented by the employment of private nurses and additional assistant nurses. At the same time an attempt was made to begin re-organisation of the staff along the lines that will ultimately be necessary when the hospital is extended and altered so as to become a training school.

As will be evident from the account of the work of the hospital given below, the staff have tackled manfully the excessive incidence of disease and can be very proud of the excellent results achieved, particularly in the treatment of the severe cases of diphtheria, which were received during the year.

Miss E. H. Wallace left the service of the Corporation in August to take up a new appointment at the Coast Hospital, Bournemouth, while the Assistant Matron, Miss Alexander, received similar promotion to be Matron of Houghall Isolation Hospital, Durham. Miss E. F. Robertson of the City Isolation Hospital, Leicester. was appointed Matron and commenced her duties in September, 1937, to find herself plunged at once into the busiest and most difficult time the hospital has had for many years.

I have to express my admiration of the manner in which she tackled her difficult task, ably seconded by the nursing staff.

With the high incidence of diphtheria in the Borough during the latter 4 months of the year, it was not possible to use the hospital for the treatment of such infections as measles, pneumonia and whooping cough, save when these occurred as complications.

The following is a clinical record of the conditions treated, as evoked by an analysis of the case records after discharge.

SCARLET FEVER.

269 cases of scarlet fever were admitted and in 4 cases, the diagnosis was revised as follows:—1 chickenpox, 1 influenza, 1 measles and 1 tonsilitis. There was one death from the complications of acute rheumatism and pericarditis with effusion in a child of two years. The case mortality of the patients treated was therefore less than .3%. The return cases during the year numbered 5, i.e., roughly 2% of the patients discharged. There were 3 cases of “ surgical ” scarlet fever.

The principal methods of treatment adopted during the year were the administration of scarlet fever streptococcus antitoxin and the exhibition of “ sulphonamide ” tablets in doses of half a grain three times a day.

140 patients received antitoxin, the principal therapeutic indications being severe toxæmia or the presence of exudate on the throat. 68 cases were treated with “ sulphonamide ” alone, this being the routine measure where serum was not administered. 28 cases were treated with serum and “ sulphonamide ” combined, when glandular or other inflammations persisted after serotherapy. The remaining cases were treated along general lines

The main complications observed are listed below:—

							<i>Number</i>	<i>Incidence</i>
Otitis Media	...	...	...	...	...	...	58	7%
Cervical Adenitis	...	...	...	...	...	...	36	13%
Albuminuria	...	...	...	...	...	...	11	5%
Nephritis	...	...	...	...	...	...	2	5%
Rheumatism	...	...	...	...	...	...	11	4%
Rhinitis	...	...	...	...	...	...	6	2%
Pneumonia and Empyema	...	...	...	...	...	...	1	.4%
Pericarditis	...	...	...	...	...	...	1	.4%
Meningismus	...	...	...	...	...	...	1	.4%
Ethmoiditis	...	...	...	...	...	...	1	.4%
Miscellaneous	...	...	...	...	...	...	11	4%

The experience of the incidence of complications with the three main methods of treatment would leave the superficial impression that the administration of antitoxin combined with the administration of "sulphonamide" by the mouth, is the ideal treatment for the prevention of the complications scarlet fever.

The incidence of complications, particularly of otitis media and adenitis, appeared to be the highest in the group treated with antitoxin alone, while they were at a minimum in the group treated by antitoxin and "sulphonamide" together. This view coincides with clinical observation, whereby it was noted that no case of otitis media resisted treatment by "sulphonamide," nor did any case of adenitis continue to pus formation when "sulphonamide" was given.

In the group of cases given "sulphonamide" the complication of sulphaemo globinaemia was noted twice. This was due to the use of liquorice powder (which contains sulphur) as an alternative to the saline sulphates for purgative purposes.

Complicating diseases were present as follows:—

Diphtheria	...	...	...	...	2
Whooping Cough	...	...	...	...	2
Chickenpox	...	...	...	...	5
Measles	...	...	...	...	1
Catarrhal Jaundice	...	...	...	...	1

NOTE.—The preparations of "sulphonamide" (or "Sulphanilamide") used were "prontosil soluble" "prontosil album," "streptocide," and "proseptasine."

DIPHTHERIA.

557 cases of notified diphtheria were admitted, but the diagnosis was revised in 34 cases as follows:—follicular tonsillitis 26, Vincent's angina 1, laryngismus and laryngitis 3, broncho-pneumonia 1, chickenpox 1, measles 1, and no apparant disease 1.

Of the cases admitted wrongly diagnosed, there were three deaths, 1 from exophthalmic goitre and tonsilitis, 1 from measles, whooping cough and pneumonia, and 1 from pneumonia.

523 cases of diphtheria were therefore treated and 24 deaths occurred, giving a case mortality of 4·8%, a very low figure indeed considering the type of disease treated.

An analysis of the type of disease present in the cases discharged and died is given herewith :—

							<i>Discharged</i>	<i>Died</i>
Apparent " carriers "	...	...	...	...	...	...	6	—
Faucial	...	...	...	...	...	...	423	14
Laryngeal	...	...	...	...	...	...	7	2
Nasal	...	...	...	...	...	...	2	—
Faucial and Laryngeal	...	...	...	...	...	...	4	2
Faucial and Nasal	...	...	...	...	...	...	8	6
							<hr/> 450 <hr/>	<hr/> 24 <hr/>

It was noted at the end of 1936 that the incidence and virulence of diphtheria had become distinctly worse at the end of the year. This increased virulence and higher incidence of diphtheria continued throughout the year and were especially severe in the last three months of the year. Roughly half of the cases appeared to be of the type in which a rapid and extensive membrane formation was accompanied by oedema of the fauces and neck glands. Moreover these tended, in convalescence, to suffer from albuminuria and peripheral neuritis was also a common sequel.

Experience in dealing with the disease in this form suggested that a minimum dosage of 80,000 units of diphtheria antitoxin was necessary in order to produce satisfactory results, and in many cases this dose was far exceeded, the maximum which was administered during the year being 220,000 units.

The rate of separation and absorption of exudate from the fauces was noted to be extremely slow in these virulent cases, as long as a week intervening between the administration of antitoxin and the cleaning of the throat.

Along with intensive serum-therapy, adjuvants were used, such as gas gangrene antitoxin in foetid cases, coramine and adrenal cortical extract in toxic cases and glucose by the mouth or per rectum in cases showing myocardial weakness. The use of strychnine hypodermically was a routine measure in cases suffering from severe peripheral neuritis.

Several haemorrhagic cases of the disease were received and all were fatal save in one instance. Altogether 15 of the cases admitted showed a predominance of laryngeal symptoms, and in five of these the operation of tracheotomy was performed. Despite tracheotomy, death resulted in four cases after an interval of about three days, apparently due to low blockage of the trachea and bronchi by membrane formation.

The complications observed were as follows :—

					Number	In 478 Incidence
Albuminuria and Nephritis	...	...	...	...	66	12%
Paralysis—						
Palate ... ..	...	...	...	...	20	5%
Palate and Legs	...	...	...	...	5	
Palate and Eyes	...	...	...	...	4	
Cardiac Irregularities	...	...	...	...	13	2%
Otitis Media	...	...	...	...	4	1.5%
Adenitis	...	...	...	...	4	

Other diseases observed as coincident affections were :—

Epilepsy	...	...	...	...	1
Mumps	...	...	...	...	1
Scarlet Fever	...	...	...	...	7
Measles	...	...	...	...	1
Chickenpox	...	...	...	...	1
Haemophilia	...	...	...	...	1
Broncho-pneumonia	...	...	...	...	1
Cervical Adenitis	...	...	...	...	1

Observations on types of Diphtheria Bacilli prevalent in the Area.

During the month of December, an effort was made to type the bacillus responsible for each case of diphtheria admitted to hospital. Swabs taken on or before admission of all new cases were cultured in the public health laboratory and sent to Newcastle City Hospital where, by the courtesy of Dr. Charles, Medical Officer of Health, Newcastle, the organisms were typed by Dr. Naughton, Bacteriologist to the City Hospital. Altogether 78 cases were so dealt with and typing resulted as follows :—

"Gravis" infections	...	...	...	35
"Mitis" infections	...	...	...	39
"Intermedius" infections	...	...	...	2
Atypical infections	...	...	...	2
				—
				78
				—

(a) **Distribution.** The two main types of infection were prevalent side by side in the areas of the town affected, but the incidence of "gravis" infection seemed to be more concentrated and in a smaller area than the "mitis." So far as school incidence is concerned, "gravis" infections occurred alone in 10 school departments, and along with "mitis" in 6 departments, while "mitis" occurred alone in 7 departments. The two patients with "intermedius" infections included a Darlington boy here on holiday and a Wrekenton boy who attended school in Durham County. The atypical cases were not related to one another nor to other cases at home or in school.

(b) Variability of Type of Bacillus.

From the foregoing it would seem that while the two main strains of bacilli were causing the disease at times in the same school, the tendency of the strains to breed true is born out by the prevalence of one or other strain alone in 17 of the 23 school departments affected. No multiple family incidence was caused by different strains but in two instances of multiple infections in a family, the strain was "gravis" in one household and "mitis" in the other. Similarly multiple street incidence tended to be of one strain or the other exclusively.

(c) Day of Admission.

In both "gravis" and "mitis" infections, the average day of the disease on which admission to hospital was practised was the third day. The extremes were the first and fifth days of the disease in "gravis" infections and the second and seventh in "mitis" infections.

(d) Severity on Admission.

The following table classifies the cases of December according to type, severity and serum given :—

	Gravis	Mitis	Intermedius	Atypical
Mild faucial ...	13	21	—	2
Moderate faucial ...	9	11	1	—
Severe faucial ...	13	4	1	—
Laryngeal ...	—	1	—	—
Nasal ...	—	2	—	—
Total ...	35	39	2	2
Average Dose of Antitoxin (Units)	67,000	36,000	64,000	29,000
Minimum Dose ...	16,000	4,000	—	—
Maximum Dose ...	220,000	118,000	—	—

The clinical impression after some experience of typing was that one could ascribe the cases of severe rapidly spreading and oedematous diphtheria to gravis strains with certitude.

(e) Progress of Disease with Treatment.

It was noted that gravis infections were at times resistant to treatment with antitoxin. Indeed it was recognised before the typing tests were done that in the treatment of many of the cases, very large doses had to be given if oedema of the fauces or neck glands and tissues were present. Moderately large doses did not stop the membrane from spreading within 24 hours, while doses of 80,000 units often did so promptly. Nevertheless rarer instances were seen where the membrane continued to spread over the fauces and the oedema of fauces and neck grew worse, and fairly large doses of antitoxin had to be repeated on successive days until the condition abated. Careful notice was taken in December of the number of days that elapsed after admission before the throat returned to normal. The average time in gravis infections was three days as compared with 1—2 days in mitis infections. In roughly half the gravis cases, more than 3 days elapsed before the throat was normal, several cases requiring 6 or 7 days. In the mitis cases, one day was very common, and only one case failed to present a normal throat in 3 days.

The “ Intermedius ” infections seemed to resemble the “ gravis ” types, while the atypical cases were mild throughout.

The incidence of complications and deaths in the strains can be compared in this table :—

	Gravis	Mitis	Intermedius	Atypical
Total No. of Cases	35	39	2	2
Complications :—				
Albuminuria and Nephritis ...	7	4	2	—
Transient Palatal Paralysis ...	—	2	—	—
Severe Palatal and Ocular Paralysis	1	1	—	—
Heart Irregularity	2	—	—	—
Herpes Febrilis ...	2	—	1	—
Otitis Media ...	2	1	—	—
Haemorrhages ...	2	—	—	—
Deaths ...	2	1	—	—

In the fatal “ mitis ” case, there was concurrent epilepsy from which death resulted in status epilepticus.

In both types the convalescent carrier condition sometimes persisted for lengthy periods, but more so in the “ mitis ” infection than in the “ gravis.” It seems that the length of the convalescent carrier period is inversely related to the clinical severity of the disease in all types.

A few illustrative case-notes are given in synopsis :—

“ Mitis ” Infections.

(1) M.S. aged 8 years—admitted on 6th day of disease with well defined thick membrane on both tonsils and uvula on the verge of separating, and neck glands enlarged. She had had 4,000 units of antitoxin the day prior to admission and was given 32,000 units in one dose on admission. Throat normal the day after admission and subsequent progress normal. Discharged in 4 weeks.

(2) R.M. aged 1 year and 7 months. Admitted on 2nd day of disease with a well marked diphtheric patch on right tonsil and a few flecks of membrane on the right. 30,000 units of serum were administered and on the next day the throat was clean. He was discharged fit and well in 4 weeks.

(3) M.W. aged 10 years. Admitted on 4th day of disease—membrane covering both tonsils and soft palate—glands of neck swollen on left side. She had had 8,000 units of serum the day previous to admission and a further 70,000 units were given on admission. The next day the left tonsil and fauces were much swollen and on both sides the neck glands were oedematous. A further 20,000 units of serum were given. On the third day, membrane was still present on the left tonsil and uvula and 20,000 units of serum were given with the result that on the fourth day the throat was clean and the neck glands normal. On the 11th day the voice was nasal and on the 18th there was albuminuria for one day. On the 25th day, the voice had cleared, and the patient was allowed up to be discharged on the 31st day of the disease, quite well.

(4) J.B. aged 10 years. Admitted on the 4th day of the disease with a history of chronic epilepsy. She had a foetid membrane covering the left tonsil—the fauces were swollen and the glands of the neck markedly enlarged. There was a concurrent nasal membrane blocking the nasal passages. She was given 80,000 units on admission followed by a further 20,000 units the day after. By the fourth day after admission the throat and neck were normal. She remained well and had no fits until the eighteenth day, when she developed left otitis media and albuminuria. On the nineteenth day the voice was nasal. On the 21st day she vomited. Fluids were restricted to sips of water and vomiting ceased. Palatal palsy and albuminuria continued however. On the 27th day, she had nine fits in succession and became very thirsty although she retained consciousness. On the 28th day, after 2 more fits, she went into status epilepticus and with a rapid rise of the temperature, died.

“ Gravis ” Infections.

(1) R.D. aged 11 years. Admitted on 2nd day of disease—fauces swollen but only a few spots of exudate to be seen on tonsils. Glands of neck palpable. 24,000 units of serum given. Next day throat was normal. Albumin and blood appeared in the urine on the third day and herpes labialis appeared in a crop on the chin on the 5th day. The urine became normal on the 11th day, and thereafter his progress was normal until discharge fit and well on the 27th day after admission.

(2) M.S. aged 8 years. Admitted on 3rd day of disease—presented extensive foetid membrane on both tonsils and palate with a “ bullneck ” appearance of the neck glands. The fauces were also oedematous. 70,000 units of serum were given at once, and on the next day there was no change. 40,000 units of antitoxin along with 8,000 units of gas gangrene antitoxin were administered, a dose that was repeated on the 3rd day as foetor and oedema persisted. On the 4th day, epistaxis and “ coffee ground ” vomiting appeared. Calcium was given hypodermically on the 5th day and epistaxis ceased, but the vomiting continued with a progressive weakening of the pulse until death on the 7th day, despite the administration of salines per rectum and stimulants.

(3) G.A. aged 7 years. admitted 4th day of illness. Slightly swollen fauces with membrane on left tonsil and a few spots on the right. The left tonsillar gland was enlarged. 40,000 units of serum were given at once. The next day the membrane had spread to cover the palate and both tonsils, which had become greatly swollen. The glands of the neck were assuming the bullneck form. 60,000 units of antitoxin were given and on the 3rd day, the face and neck showed tremendous oedema, so that the child's face was about twice as broad as normally. She was given a further 60,000 units of antitoxin. On the 4th day the oedema began to subside and the membrane ceased spreading. The throat was practically clean on the 6th day but there was still oedema of the face and neck. On the 7th day vomiting began and continued with a failing pulse and cyanosis for five days, when palatal paralysis became evident by her vocal intonation and death occurred.

(4) J.K. aged 9 years. Admitted on second day of illness. This child had an attack of diphtheria and was treated in Sheriff Hill Hospital six months before for a moderately severe attack. On admission she had severe oedema of the fauces with extensive membrane on both tonsils and a bullneck appearance of the neck. She was given 80,000 units of serum and next day presented little improvement. A further 40,000 units were given and on the fourth day the throat and neck were practically normal. On the 8th day, albuminuria commenced, to continue until the 31st day. She was discharged quite recovered on the 48th day.

“ Intermedius ” Infection.

E.S. aged 9 years. Admitted on 2nd day of illness with oedema of fauces and membrane covering opposed surfaces of tonsils. The glands of the neck were somewhat enlarged. 64,000 units of serum were given. During the night the boy was very delirious and next day local improvement was evident. A further 20,000 units were given and on the 3rd day, the membrane was actively disintegrating while oedema had subsided. Albuminuria began on the 8th day and continued to the 17th day. Subsequent progress was normal and the patient was discharged on the 31st day.

“ Atypical ” Infection.

T.F. aged 8 years. Admitted on 2nd day of illness—presented small patches of membrane on the tonsils. He was given 24,000 units of serum. Next day the throat was clean. Subsequent progress was normal but he continued to yield positive throat swabs until the 35th day. He was discharged on the 42nd day.

MENINGITIS.

Seven cases notified as meningitis were admitted to hospital. Five of these were infants and suffering from meningococcal infections. All died, despite intensive serotherapy. One child of 4 years suffering from meningococcal meningitis recovered rapidly with serum. The seventh case of meningitis admitted was a puerperal woman, with streptococcal pyaemia, in whom the meningitis was part of a general infection.

The cases of infantile meningitis were puzzling. Not a single case reacted to serotherapy, although all the commercial polyvalent sera and group II Serum (Lister's) were used besides meningococcal antitoxin. The explanation would seem to lie in the types of meningococci present. Typing of three strains of meningococci isolated revealed that one was Group II strain and two were atypical. One strain indeed was not, as judged by fermentation reactions, a meningococcus at all.

Attempts were made to cure the infants by “ sulphonamide ” solution but not a single case benefited in any way. Another case was given maternal blood serum intrathecally, again without benefit.

It would seem that in cases of infantile meningitis, there is little hope of effecting cure along orthodox lines.

DYSENTERY.

Two cases of suspected dysentery were admitted but on investigation, these proved to be cases of B. Aertrycke infection from a family infected from a very obscure source. Both recovered rapidly.

ERYSIPELAS.

Thirteen cases were admitted and two deaths occurred, one in a man with a cellular infection of the tissues of the upper jaw following dental extraction, and one in a man with gangrenous erysipelas of the lower half of the trunk. Both these were admitted in a late stage of the disease.

The cases of idiopathic erysipelas reacted well and rapidly to serotherapy and "sulphonamide."

PNEUMONIA.

Sixteen cases were admitted, and twelve were lobar. There were 4 deaths, all males. It was impossible to admit many cases of this disease during the year, due to pressure of other infections. Methods of treatment included vaccine therapy, injection of "omnadin" and "S.U.P. 36," etc.

MEASLES.

Three complicated cases of measles were admitted, one being moribund on arrival at the hospital. Measles occurred as a cross infection in several cases. Where a case was discovered, immune globulin injections were given to susceptible contacts with a resultant very modified attack in these.

MISCELLANEOUS.

One case of encephalitis admitted proved to be acute poliomyelitis and died. One case of post scarlatinal mastoiditis treated elsewhere was admitted for operation with ultimate recovery. This child was discharged from an isolation hospital after 3 months' treatment. It had suffered from a chronic otorrhoea, prior to scarlatinal infection, but treatment made no difference to the otorrhoea. After discharge she infected her two sisters and finally developed acute mastoiditis. After operation the ear dried up.

The observation case was a doubtful scarlet fever, in whom the diagnosis was verified.

CONDITION OF PATIENTS ADMITTED.

It is interesting to reproduce a summary of certain findings, not however related to infectious disease, which were ascertained during the year.

A large number, viz., 267, of the children admitted were verminous, while 67 showed an infestation of the hair with nits. Thirty-six cases were very dirty on admission.

The nutrition of all patients admitted was estimated as a check on school medical returns. Altogether 104 patients were suffering from subnormal nutrition, i.e., roughly 12%. The improvement in nutrition of many of these cases on hospital diet and adequate rest, despite the presence of disease, was very striking.

STAFF OF THE HOSPITAL.

During the year attempts were made to organise the nursing staff of the hospital along the lines ultimately necessary after extension. In addition to this, the pressure on the hospital for treatment of diphtheria led to considerable augmentation of the staff, so that at the end of the year it comprised the following members—matron, 3 ward sisters, 2 staff nurses, 5 private nurses and 16 probationer nurses.

The domestic staff consisted of—cook, 2 housemaids, 8 wardmaids, 1 laundress, 2 assistant laundresses.

No change was made in the male staff, which still includes 1 resident porter and the following 3 non-resident officers—assistant porter, chauffeur and relief chauffeur.

Roughly half of the nursing staff was boarded in two adjoining 5-roomed municipal houses, which were specially leased by the Hospitals Committee towards the end of the year.

At the end of the year, the Hospitals Committee approved of an application being made to the General Nursing Council for the approval of the institution as a training school in association or affiliation with Whinney House Sanatorium.

ACCOMMODATION OF THE HOSPITAL.

It is to be regretted that during 1937, the work of extending the hospital and building the new administrative block had not yet begun, although tenders had been obtained and submitted by the end of the year to the Ministry of Health for approval.

A certain amount of extension had to be carried out however by displacing the maids from the corrugated iron ward of the hospital, which was refitted and decorated so that it now becomes, in many ways, the best ward block in the institution. The corrugated iron ward consists of 14 cubicles separated from one another by wooden partitions reaching to the ceilings of the block and each separately ventilated into a central corridor and to the outside. It is ideal for the nursing of young children suffering from such diseases as measles, whooping cough and pneumonia, but great precautions are taken to eliminate the fire-risk.

The refitting of the corrugated iron ward makes the accommodation roughly of 100 beds, but each of the cubicles in the corrugated iron ward could quite well take two cots or two small beds containing young children.

The accommodation available at the end of the year is listed below :—

	Dimensions	144 sq. ft. per bed	At 12 ft. bed centres
Ward Block 1.			
2 Main Wards	each 48 x 24 ft.	16 beds	20 beds
1 Large Side Ward	„ 20 x 16 ft.	2 „	4 „
2 Single Bed Side Wards		2 „	2 „
Ward Block II.			
2 Main Wards	each 48 x 24 ft.	16 „	20 „
1 Large Side Ward	„ 20 x 16 ft.	2 „	4 „
2 Single Bed Wards		2 „	2 „
Ward Block III.			
2 Main Wards	each 50 x 24 ft.	19 „	20 „
1 Large Side Ward	„ 24½ x 24 ft.	4 „	6 „
2 Smaller Wards	„ 16 x 8 ft.	2 „	4 „
Corrugated Iron Block IV.			
14 Cubicles	each 15 x 11 ft.	14 „	28 „
Totals		79 beds	110 beds

The ultimate extension of the ward accommodation which will probably be carried out during 1938 will therefore raise the accommodation of the hospital from these figures to a total of 110-138 beds; indeed the hospital could quite well take 150 patients without serious overcrowding after the planned extension.

DISINFECTIONS.

949 houses were disinfected after removal or isolation of infectious disease and 78 after death or removal to hospital of phthisis cases. The steam disinfectors at the hospital were used to disinfect 451 charges of infected clothing and bedding from private houses and the hospital wards, and 52 charges comprising the laundry from Whinney House Sanatorium. The latter is subsequently laundered by a private firm.

COST OF THE HOSPITAL, 1937.

In 1937, the total expenditure on the hospital was £6,327. From this figure, the cost per patient per day can be worked out at 5/3d. and the cost per bed per annum, on a basis of 82 beds, is £77 3s. 0d. These low figures have naturally been obtained by the dilution of overhead charges by the increased number of patient days during the year.

JAMES GRANT, M.D., D.P.H.

Medical Superintendent.

WHINNEY HOUSE TUBERCULOSIS HOSPITAL. ANNUAL REPORT FOR 1937.

This hospital was opened in June, 1926, for the treatment of Pulmonary Tuberculosis in an intermediate stage of the disease, the isolation of infectious cases and observation of doubtful cases.

GENERAL STATISTICS.

Table of Admissions, Discharges and Deaths.

		In Sana- torium, 1/1/37	Ad- missions	Dis- charges	Deaths	In Sana- torium, 31/12/37
Pulmonary Tuberculosis	TB + M	21	72	57	16	20
	F	10	44	34	3	17
	Ch	—	2	1	—	1
	TB—M	3	7	7	—	3
	F	5	6	7	1	3
	Ch	1	1	2	—	—
	Non-M.	2	—	1	1	—
	Pulmonary F	1	2	3	—	—
	Tuberculosis Ch	—	1	1	—	—
Observation Cases	M.	—	5	5	—	—
	F	—	1	1	—	—
	Ch	—	—	—	—	—
Totals	M.	26	84	70	17	23
	F	16	53	45	4	20
	Ch	1	4	4	—	1
Totals		43	141	119	21	44

(a) Beds Available.

On February 1st, 1937, the accommodation of the hospital was increased from 44 beds (27 males, 17 females) to 48 (27 males, 21 females). The average number of beds available was therefore 47·7.

This was brought about by having a new flat built for the matron's quarters and the utilisation of her old sitting room as an additional ward.

(b) Patient Days in 1937.

Males	....	....	....	8602
Females	....	....	....	7047
Children	....	....	....	657
Total				16306

The number of days in hospital of bed patients (i.e., patients having at least two meals in bed) was 8,960.

(c) Average Duration of Stay in Hospital.

(1) Excluding patients in residence under 28 days :—

117 patients stayed 16,016 days.—

Average of 136·9 days.

(2) Including patients in residence under 28 days :—

(23 other patients stayed 290 days only)—

Average of 116·47 days.

(d) Average Number of Beds occupied during the Year.

44·68	{ Males	23·56
	{ Females	19·3
	{ Children	1·8

The lowest number occupied at any time was 40
(June 22nd—29th, 1937).

**Comparative Number of Admissions and Patient Days
1930-1937.**

Patients admitted		Patient Days			
		Males	Females	Children	Total
1930	143	9732	4619	683	15034
1931	154	9068	5012	314	14394
1932	134	9222	5876	139	15237
1933	163	9459	6019	135	15613
1934	143	9424	5902	412	15738
1935	122	9694	5700	331	15725
1936	108	9678	5702	313	15693
1937	140	8602	7047	657	16306

HOSPITAL TREATMENT.

The hospital is equipped with an X-ray apparatus, and all modern methods of treatment are undertaken, with the exception of major surgical operations. These major operations, when deemed necessary, are performed at the Newcastle General Hospital.

The following is a short resumé of some of the work done at the hospital during 1937 :—

(a) **Pneumothorax Treatment.**

During the year 24 new cases of pneumothorax were induced at the hospital, and these, together with 17 old cases were given 419 refills.

This is an increase of 147 compared with 1936 and is illustrative of the fact that more and more reliance is being placed in this form of treatment, which appears to be justified by the results obtained.

The conditions of these 41 patients at the end of the year was as follows :—

Quiescent	....	....	....	....	15
Improved	....	....	....	....	18
No Material Improvement	....	....	....	....	6
Died	....	....	....	....	2

The two patients who died had very incomplete collapse and the treatment was discontinued after only 3 and 4 refills respectively.

Of the other patients, 7 have completed their treatment, 8 cases have been terminated for various reasons, and 24 were still continuing their treatment at the end of the year.

(b) **“ Gold ” Treatment (Sanocrysin, etc.)**

37 patients were treated during the year by injection of gold salts, a total of 382 injections being given.

During the year under review, intravenous injection of Sanocrysin combined with 10 c.c of Calcium Butyrate has been the method chosen. Better results have been obtained by com-

bining Calcium Butyrate than by the old method of dissolving the salt in sterile water, there being a considerable reduction in the number of sequelae, and it is now a rare occurrence for a patient not to be able to complete a full course of treatment as a result of albuminuria, rashes, etc.

The condition at the end of 1937, of the 37 patients treated was as follows :—

Quiescent	....	....	....	....	3
Improved	....	....	....	....	22
No Material Improvement	....	....	....	....	9
Died	....	....	....	....	3

(c) **Tuberculin.**

One patient completed a course of tuberculin treatment for renal tuberculosis, and improved sufficiently to allow her to undergo an operation for removal of a kidney. Her present condition remains satisfactory.

(d) **Surgical Treatment.**

5 patients were transferred to the Newcastle General Hospital for surgical treatment during 1937, later returning to Whinney House Hospital for convalescence.

The operations undertaken were as follows :—

Thoracoplasty	....	....	....	....	1
Phrenic Nerve Crushing	....	....	....	....	2
Plombage	....	....	....	....	2

X-RAY DEPARTMENT.

The following X-ray examinations were made :—

(a) **Dispensary Patients.**

A clinic is held once a week at the hospital, when dispensary patients attend for X-ray examinations. During 1937, 302 films were taken and 489 screen examinations were made on these patients.

(b) **Hospital Patients.**

169 films of hospital cases were taken and 170 screen examinations were performed.

STAFF OF HOSPITAL.

The Clinical Tuberculosis Officer is the Resident Medical Officer. There is thus a complete liaison between the hospital and Tuberculosis Dispensary system. In this way cases on discharge from hospital are kept under continued observation, and in the case of patients receiving pneumothorax treatment, their treatment is carried on at this hospital as out-patients.

During the year under review a 48-hour working week has been established for the nursing and domestic staff, and 4 extra beds have been added. This increase has necessitated the engagement of extra staff, which now consists of :—

Matron, S.R.N., C.M.B.
 Sister, S.R.N.
 2 Assistant Nurses (Uncertificated).
 5 Probationers (Uncertificated).

The domestic staff consists of 1 cook, 2 housemaids, 1 dining room maid, 2 wardmaids, 1 kitchen maid, and 3 morning workers.

HOSPITAL ACCOMMODATION.

The hospital consists of a converted mansion standing in 22·15 acres of semi-wooded ground and has accommodation for 48 beds arranged in 10 wards.

There are 5 wards for men on the ground floor, viz. :—

Ward 1.	18 ft. x 24 ft.	6 beds (72 sq. ft. per bed).
Ward 2.	18 ft. x 28 ft.	6 beds (84 sq. ft. per bed).
Ward 3.	14 ft. x 21 ft.	4 beds (73 sq. ft. per bed).
Ward 4.	18 ft. x 27 ft.	7 beds (69·5 sq. ft. per bed).
Ward 5.	18 ft. x 16 ft.	4 beds (72 sq. ft. per bed).

Total—27 Male beds.

On the first floor there are five wards for women :—

Ward 6.	18 ft. x 21 ft.	6 beds (63 sq. ft. per bed).
Ward 7.	19 ft. x 26 ft.	6 beds (82 sq. ft. per bed).
Ward 8.	10 ft. x 11½ ft.	1 bed (115 sq. ft. per bed).
Ward 9.	21 ft. x 13⅔ ft.	4 beds (71 sq. ft. per bed).
Ward 10.	14 ft. x 21 ft.	4 beds (73 sq. ft. per bed).

Total—21 Female beds.

HOSPITAL ALTERATIONS AND EXTENSIONS.

At the beginning of February the new quarters for the matron, consisting of a sitting room, two bedrooms, with bathroom and watercloset, were completed. This released her original sitting room which was utilised as an extra ward of four beds for female patients. In addition open-air rest shelters erected in front of the hospital building were completed. These consist of four shelters each 28 ft. long, to accommodate twenty men, and one shelter 67 ft. long to accommodate twelve women, and are intended to allow patients to take their prescribed rests out of doors.

COST OF MAINTENANCE, 1937.

Actual Expenditure, 1937	£6,258
Cost per bed (per annum)	£136 (£2 12s. 4d. per week).
Cost per patient per day	7/8

S. D. ROWLANDS, M.D., D.P.H., B.Hy.,
Clinical Tuberculosis Officer and
Resident Medical Officer.

HIGH TEAMS INSTITUTION—HOSPITAL WARDS.

GENERAL STATISTICS FOR 1937.

Table of Admissions, Discharges and Deaths.

Classification.	In Hos- pital 1/1/37	Admis- sions	Dis- charges	Deaths	In Hos- pital 31/12/37
Acute Infectious Disease	3	8	4	2	5
Influenza	2	8	7	1	2
Tuberculosis—Pulmonary	33	67	45	30	25
Non-Pulmonary	8	14	10	7	5
Malignant Disease	8	59	17	45	5
Acute Rheumatism	3	23	25	—	1
Non-Articular—Rheumatism	4	1	—	—	5
Chronic Arthritis	6	6	3	—	9
Venereal Disease	—	6	3	3	—
Puerperal Sepsis	—	—	—	—	—
Other conditions associated with Pregnancy and Child- birth	4	45	35	4	10
Mental Disease—					
(a) Senile Dementia	72	23	23	37	35
(b) Other	14	60	59	3	12
Senile Decay.....	6	81	45	30	12
Injuries and Accidents	9	63	45	14	13
Other Nervous Diseases	2	74	66	9	1
Other Respiratory Diseases ...	18	87	66	23	16
Other Circulatory Diseases ...	19	171	86	98	6
Other Digestive Diseases	10	20	26	—	4
Other Genito Urinary Diseases	6	28	20	9	5
Other Skin Diseases	5	60	53	—	12
Other Diseases	12	105	103	1	13
Maternity Wards Mothers ...	3	39	37	—	5
Babies ...	6	37	38	4	1
	253	1085	816	320	202

L. L. WESTROPE, M.D.,
Medical Officer.

APPENDIX.

TABLE I.
ANALYSIS OF DEATHS ACCORDING TO CAUSES, AGES, SEX, AND WARDS, DURING THE YEAR 1937.

ANALYSIS OF DEATHS ACCORDING TO CAUSES, AGES, SEX, AND WARD.																										
	Total.	Males.	Females.	0-1 Yrs.	1-2 Yrs.	2-5 Yrs.	5-13 Yrs.	13-23 Yrs.	23-45 Yrs.	45-65 Yrs.	65-75 Yrs.	Over 75 Yrs.	North	North-East	North-West	Central	East-Central	South-Central	West-Central	East	South	West	Total Deaths in Public Institutions in the Borough.	Transferable Deaths.		
																								Inward	Outward	
Certified	1639818	721	156	22	25	1	51	64	171	412	332	306	132	139	187	158	171	121	134	177	171	149	—	221	80	
Uncertified	73 42	31	5	—	—	—	—	—	—	—	—	17	5	3	13	6	14	4	6	10	6	6	—	1	8	
Typhoid and Paratyphoid Fever ..	—	—	—	—	2	—	—	—	—	—	—	—	1	—	—	1	—	—	—	—	—	—	—	—	—	
Measles	3	2	1	3	1	1	—	—	—	—	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—	
Scarlet Fever	5	4	1	—	—	—	—	—	—	—	—	—	6	6	1	3	5	1	1	4	4	5	25	—	—	
Whooping Cough	27	15	12	1	1	3	21	1	—	—	—	—	6	8	3	9	2	4	5	4	—	—	3	2	—	
Diphtheria	50	23	27	2	—	—	4	2	7	17	13	1	6	8	—	—	—	1	—	—	—	—	—	—	—	
Influenza	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Encephalitis Lethargica	5	4	1	4	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	—	—	
Cerebro-Spinal Fever	118	74	44	1	1	1	4	30	37	40	4	2	10	10	19	10	20	4	3	18	12	12	49	6	6	
Pulmonary Tuberculosis	14	5	9	1	—	1	4	3	3	2	—	—	2	—	2	1	4	1	—	—	1	3	9	2	2	
Other Tuberculous Diseases	9	9	—	3	—	—	—	—	2	2	1	—	1	2	3	1	2	—	—	—	2	2	7	2	1	
Syphilis	5	5	—	—	—	—	—	—	1	88	58	32	16	20	21	21	18	15	23	18	23	3	39	5	8	
General Paralysis of Insane	197	101	96	—	—	—	—	—	2	28	44	35	12	8	6	11	7	9	14	14	17	11	39	1	2	
Cancer	109	58	51	—	—	—	—	—	2	2	4	—	3	23	30	25	36	27	30	30	36	25	34	18	8	
Diabetes	284	135	149	—	—	—	3	6	18	86	98	73	22	23	30	25	36	27	30	30	36	25	34	18	8	
Cerebral Haemorrhage, etc.	1	1	—	—	—	—	—	—	1	27	32	43	6	6	11	15	12	14	8	15	7	9	14	2	6	
Heart Disease	103	58	45	—	—	—	—	—	3	10	17	23	11	3	8	11	8	4	5	6	7	2	9	1	3	
Aneurysm	65	37	28	11	—	1	—	—	5	6	7	4	5	10	19	5	10	7	4	9	1	7	9	3	3	
Other Circulatory Diseases	77	37	40	32	11	8	2	2	5	6	7	4	4	5	10	5	5	3	4	6	4	2	10	7	2	
Bronchitis	46	32	14	4	1	2	1	2	15	11	7	2	4	5	8	5	5	3	1	3	1	1	3	1	2	
Broncho-Pneumonia	14	5	9	1	1	—	—	—	5	4	3	5	1	1	1	2	4	3	2	3	1	1	1	12	—	
Pneumonia	15	14	1	—	—	—	—	—	1	9	1	1	1	1	7	4	3	—	—	8	2	1	3	7	—	
Other Respiratory Diseases	25	15	10	18	1	2	1	1	2	3	1	2	1	—	—	—	—	—	—	—	2	4	—	9	—	
Peptic Ulcer	9	6	3	—	—	—	—	—	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Diarrhoea, &c.	5	4	1	—	—	—	—	—	1	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Appendicitis	5	4	1	—	—	—	—	—	1	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Cirrhosis of Liver	4	2	2	—	—	—	—	—	1	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other Diseases of Liver	32	19	13	3	—	1	1	2	5	12	5	—	4	1	1	4	2	2	4	5	2	7	2	20	4	
Other Digestive Diseases	35	14	21	—	—	—	—	—	3	15	8	—	2	3	3	1	4	3	2	5	6	4	3	10	1	
Acute and Chronic Nephritis	2	2	—	—	—	—	—	—	2	—	—	—	—	—	2	1	—	—	—	—	—	—	2	6	—	
Puerperal Sepsis	6	—	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other Puerperal Causes	69	39	30	69	—	—	—	—	—	—	—	—	5	7	10	6	9	3	4	11	10	4	5	17	1	
Congenital Debility, Malformation and Premature Birth	80	31	49	—	—	—	—	—	—	—	—	—	62	7	11	12	8	6	9	6	9	7	64	5	18	
Senility	20	12	8	—	—	—	—	—	6	14	—	—	3	1	4	—	2	2	2	2	4	4	4	4	2	2
Suicide	48	32	16	1	3	1	5	5	8	11	7	7	3	3	5	4	8	4	4	6	8	3	15	22	1	
Other Deaths from Violence	97	47	50	5	3	2	6	6	22	30	15	8	3	7	16	10	10	6	8	14	13	10	28	35	9	
Other Defined Diseases	23	15	8	2	—	—	—	—	2	2	2	11	6	4	—	6	1	5	1	1	2	3	3	—	2	—
Causes Ill-defined or unknown	1612860	752	161	25	23	52	66	175	430	357	323	137	142	200	164	185	125	140	187	177	155	403	222	88	—	

APPENDIX.

TABULAR II.

NETT NUMBER OF DEATHS, arranged according to Ages and Wards, during the Year 1927.

	Total.	Males.	Females.	Years 0-1	Years 1-2	Years 2-3	Years 3-15	Years 15-25	Years 25-45	Years 45-65	Years 65-75	Years 75 up	North Ward	North East Ward.	North West Ward.	Central Ward.	East Central Ward.	South Central Ward.	West Central Ward.	East Ward.	South Ward.	West Ward.	South Ward.	West Ward.	Inward.	Outward.	TRANS- FERABLE DEATHS
First Quarter.....	493	251	242	35	9	6	19	22	49	131	112	110	47	47	49	64	62	37	45	49	51	42	52	26	52	26	
Second Quarter	397	217	180	45	5	3	8	18	48	119	87	64	26	36	54	39	41	33	31	48	42	47	52	31	52	31	
Third Quarter	320	174	146	28	4	9	9	16	36	87	72	59	26	23	43	31	35	35	31	37	30	29	63	15	63	15	
Fourth Quarter	402	218	184	53	7	5	16	10	42	93	86	90	38	36	54	30	47	20	33	53	54	37	55	16	55	16	
Totals	1612	860	752	161	25	23	52	66	175	430	357	323	137	142	200	164	185	125	140	187	177	155	222	88	222	88	
Rate per 1,000 of Population	13.7	—	—	—	—	—	—	—	—	—	—	—	15.8	17.2	14.4	15.0	16.3	11.4	12.9	12.0	13.3	11.0	—	—	—	—	—